

Calculation of Monthly Emissions from Material Handling System at Terminal 5

January 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	19,644.47	3	0.0007
Un-Treated (White)	PM10	4.60E-05	31,433.30	3	0.0022
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	25,730.26	5	0.0015
Un-Treated (White)	PM10	4.60E-05	52,128.37	5	0.0060
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	87,718.64	7	0.0071
Un-Treated (White)	PM10	4.60E-05	39,437.64	7	0.0063
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			256,092.66		0.0237

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

February 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	0.00	3	0.0000
Un-Treated (White)	PM10	4.60E-05	18,911.67	3	0.0013
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Un-Treated (White)	PM10	4.60E-05	7,602.00	5	0.0009
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	20,854.00	7	0.0034
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			47,367.67		0.0055

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

March 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	7,003.95	3	0.0002
Un-Treated (White)	PM10	4.60E-05	3,295.89	3	0.0002
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Un-Treated (White)	PM10	4.60E-05	10,174.39	5	0.0012
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	16,656.40	7	0.0013
Un-Treated (White)	PM10	4.60E-05	25,756.41	7	0.0041
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			62,887.04		0.0071

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

April 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	3,512.00	3	0.0001
Un-Treated (White)	PM10	4.60E-05	13,318.63	3	0.0009
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Un-Treated (White)	PM10	4.60E-05	1,609.95	5	0.0002
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	10,032.85	7	0.0016
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			28,473.43		0.0028

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

May 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	0.00	3	0.0000
Un-Treated (White)	PM10	4.60E-05	4,235.35	3	0.0003
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Un-Treated (White)	PM10	4.60E-05	36,529.90	5	0.0042
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	23,075.10	7	0.0037
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			63,840.35		0.0082

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

June 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	0.00	3	0.0000
Un-Treated (White)	PM10	4.60E-05	33,518.70	3	0.0023
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	28,566.55	5	0.0016
Un-Treated (White)	PM10	4.60E-05	0.00	5	0.0000
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	13,462.95	7	0.0011
Un-Treated (White)	PM10	4.60E-05	6,493.20	7	0.0010
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			82,041.40		0.0061

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

July 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	24,583.95	3	0.0008
Un-Treated (White)	PM10	4.60E-05	8,877.57	3	0.0006
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Un-Treated (White)	PM10	4.60E-05	15,408.60	5	0.0018
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	15,572.50	7	0.0025
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			64,442.62		0.0057

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

August 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	18,081.10	3	0.0006
Un-Treated (White)	PM10	4.60E-05	30,623.03	3	0.0021
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	48,202.01	5	0.0028
Un-Treated (White)	PM10	4.60E-05	31,633.80	5	0.0036
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	4,030.39	7	0.0003
Un-Treated (White)	PM10	4.60E-05	25,365.01	7	0.0041
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			157,935.32		0.0136

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

September 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	40,401.24	3	0.0014
Un-Treated (White)	PM10	4.60E-05	103.10	3	0.0000
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	26,899.20	5	0.0015
Un-Treated (White)	PM10	4.60E-05	11,596.00	5	0.0013
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	30,389.89	7	0.0024
Un-Treated (White)	PM10	4.60E-05	10,908.40	7	0.0018
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			120,297.84		0.0085

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

October 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	32,473.50	3	0.0011
Un-Treated (White)	PM10	4.60E-05	8,770.02	3	0.0006
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	32,238.30	5	0.0019
Un-Treated (White)	PM10	4.60E-05	26,097.50	5	0.0030
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	21,218.50	7	0.0017
Un-Treated (White)	PM10	4.60E-05	18,044.00	7	0.0029
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			138,841.82		0.0112

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

November 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	0.00	3	0.0000
Un-Treated (White)	PM10	4.60E-05	50,884.44	3	0.0035
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	13,028.30	5	0.0007
Un-Treated (White)	PM10	4.60E-05	23,437.34	5	0.0027
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	2,678.60	7	0.0002
Un-Treated (White)	PM10	4.60E-05	29,575.06	7	0.0048
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			119,603.74		0.0119

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

December 2009

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	53,918.31	3	0.0019
Un-Treated (White)	PM10	4.60E-05	30,736.91	3	0.0021
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	84,511.40	5	0.0049
Un-Treated (White)	PM10	4.60E-05	47,823.30	5	0.0055
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	45,546.20	7	0.0037
Un-Treated (White)	PM10	4.60E-05	66,150.70	7	0.0107
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			328,686.83		0.0287

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.



Kinder Morgan Terminals

January 26, 2009

Ms. Tina Leppaluoto
Department of Environmental Quality
NWR – East Side Office
1550 NW Eastman Parkway
Suite 290
Gresham, Oregon 97030

Re: Air Contaminant Discharge Permit No. 26-3071

Dear Ms. Leppaluoto:

I have enclosed an original and two (2) copies of Kinder Morgan Terminals annual Air Contaminant Discharge Report for our facility located at Terminal 5 in Portland, Oregon.

If you should have any questions regarding the report, please call Brent McMullin (1.800.937.3731) or myself at (503.807.9686).

Regards,

A handwritten signature in black ink, appearing to read "Jack Waller".

Jack Waller
Manager, T-5
Kinder Morgan Terminals

Cc: Air Permit Annual Report File

KINDER MORGAN TERMINALS, INC.

Portland Bulk Terminals, Terminal 5
Air Contaminant Discharge Permit No. 26-3071
Annual Report to Oregon Department of Environmental Quality

Instructions: This form [there are five (5) pages to the form] must be completed and submitted to the DEQ no later than January 15th of each year for operations during the previous calendar year. Mail the original and two copies to: Department of Environmental Quality, 2020 SW 4th Avenue, Suite No. 400, Portland, OR 97201-5884.

Mail a copy of the report to Corporate Environmental Affairs in Sorrento.

This report is for the calendar year **January 1, 2008 to December 31, 2008.**

- A. In the space below, or on a separate sheet of paper attached to this form, list the amounts (tons/year) and types of commodities shipped and received during the report year.

Refer to attached sheets

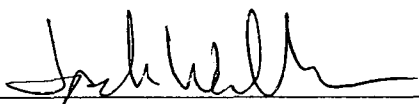
- B. Summarize below (or attach separate sheets) all fugitive dust complaints received by PBT-5 from any public citizen during the report year.

None

- C. Attach to this sheet an Upset Log sheet for all excess emissions that occurred during the report year.

If no excess emissions occurred during the report year, check the statement below and sign your name where indicated and enter the date and your title.

☒ **THIS IS TO CERTIFY THAT NO EXCESS EMISSIONS OCCURRED AT THIS FACILITY DURING THE REPORT YEAR.**

Signed 
Jack Waller

Date January 26, 2009

Title Manager, T-5

- D. In the space below, explain any permanent changes made in terminal processes and/or products handled which would affect air contaminant emissions and indicate when the changes were made.

If no such changes were made in the report year, check here:

☒ NONE

- E. List on this page (or attach a separate sheet showing) all maintenance performed on air pollution equipment during the report year.

Refer to attached documentation

DOCUMENT ALL REPAIRS AS REQUIRED IN THE AIR CONTAMINANT DISCHARGE PERMIT EFFECTIVE 7/1/02.
Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

January

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2					
DC-3	Replaced rotary valve	Replaced fan bearings			
DC-4					
DC-5					
DC-6					
DC7-A					
DC7-B					

February

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2					
DC-3	Replaced rotary valve	Replaced fan bearings			
DC-4					
DC-5	Replaced Cyclone RV valve				
DC-6					
DC7-A					
DC7-B					

March

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B		Unplug			
DC-2	Replaced rotary valve	Rebuild blower base	Unplug	Unplug	Unplug
DC-3	Unplug				
DC-4	Replaced Cyclone RV valve	Unplug	Unplug		
DC-5					
DC-6					
DC7-A	Replaced bags				
DC7-B	Replaced spout hose	Unplug	Unplug		

April

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					Clean excess cargo build-up from rotary valve
DC-1B	Replaced rotary valve	Replaced Cyclone RV valve	Unplug	Unplug	Clean excess cargo build-up from rotary valve
DC-2	Replaced rotary valve				Clean excess cargo build-up from rotary valve
DC-3	Unplug	Unplug	Unplug	Unplug	Clean excess cargo build-up from rotary valve
DC-4	Unplug	Unplug	Unplug	Unplug	Clean excess cargo build-up from rotary valve
DC-5	Unplug	Unplug	Unplug		Clean excess cargo build-up from rotary valve
DC-6					Clean excess cargo build-up from rotary valve
DC7-A					Clean excess cargo build-up from rotary valve
DC7-B	Unplug	Unplug	Unplug		Clean excess cargo build-up from rotary valve

May

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplug				
DC-1B	Unplug	Unplug	Unplug		
DC-2	Unplug	Unplug	Unplug		
DC-3	Unplug	Unplug	Unplug	Unplug	
DC-4	Unplug	Unplug			
DC-5	Unplug	Unplug			
DC-6	Unplug				
DC7-A		Replace PD Blower			
DC7-B	Unplug				

June

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Install air compressor plumbing		Install air cannon	Install air compressor	
DC-1B	Install air compressor plumbing	Replace rotary valve at cyclone	Install air cannon	Install air compressor	
DC-2	Unplug	Unplug	Unplug	Unplug	
DC-3	Unplug	Replaced bags 6-5-08 (annual PM)	Remove slide gates to clean	Re-install slide gates	
DC-4	Unplug	Replaced bags 6-7-08 (annual PM)			
DC-5	Unplug	Replaced bags 6-6-08 (annual PM)	Replace air cannon valve; replumb		
DC-6	Unplug	Replaced bags 6-6-08 (annual PM)	Clean dust ducts cyclone line to baghouse		Install air cannon
DC7-A		Replaced bags 6-5-08 (annual PM)			
DC7-B	Unplug	Unplug	Unplug	Unplug	

July

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A		Adjust V-Belt tension	Balance Dust collector		
DC-1B		Adjust V-Belt tension	Balance Dust collector		
DC-2	Unplug	Unplug	Balance Dust collector		
DC-3	Unplug		Balance Dust collector		
DC-4	Unplug	Clean dust duct cyclone to baghouse	Balance Dust collector		
DC-5			Balance Dust collector		
DC-6	Unplug	Unplug	Clean dust duct cyclone to baghouse	Balance Dust collector	
DC7-A	Unplug	Unplug		Balance Dust collector	
DC7-B				Balance Dust collector	

August

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Install overhead cover for compressor		Replace rotary valve G/B	Rebuild and install air cannon	
DC-1B	Install overhead cover for compressor				
DC-2	Install overhead cover for compressor				
DC-3					
DC-4	Install overhead cover for compressor				
DC-5	Replaced suterbuilt blower				
DC-6	Install overhead cover for compressor				
DC7-A					
DC7-B					

September

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2					
DC-3					
DC-4	Unplug Unplug Unplug				
DC-5					
DC-6					
DC7-A	Unplug Unplug Unplug				
DC7-B	Plugged 9/13, down for 3 hours, loading continued, management notified; routinely unplugged collector				

October

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Replace bags at Baghouse 10-15 (annual PM)		Repair air cannon leak	Install air line lubricator	
DC-1B	Replace bags at Baghouse 10-15 (annual PM)		Install air line lubricator		
DC-2	Install air line lubricator				
DC-3					
DC-4	Install air line lubricator				
DC-5	Replaced rotary valve				
DC-6	Install air line lubricator				
DC7-A					
DC7-B					

November

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Replaced inboard and outboard fan bearings				
DC-1B	Replaced inboard and outboard fan bearings				
DC-2	Replaced inboard and outboard fan bearings				
DC-3					
DC-4					
DC-5	Install air line lubricator	Replace baghouse door seal			
DC-6	Replaced cyclone rotary valve; rebuild and keep in warehouse				
DC7-A					
DC7-B					

December

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2					
DC-3					
DC-4	12/5 2nd shift & 12/7 1st, 2nd, 3rd shifts troubleshoot faulty high pressure alarm on baghouse; no excess emissions. Repaired filter at high pressure tubing for photohelic sensor				
DC-5					
DC-6					
DC7-A					
DC7-B					

REPAIR LOG

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2					
DC-3	Replaced Rotary Valve				
DC-4					
DC-5	Replaced Rotary Valve				
DC-6	Replaced Rotary Valve				
DC7-A					
DC7-B					

TOTAL CARGO HANDLED 2008						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
14,740	1,510,596.744	13,946	1,429,322.282	1,274,578.956	2,785,175.700	4,214,497.982
ADJUSTMENT					0	
ACTUAL CARGO HANDLED					2,785,175.700	
JANUARY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
757	77,590.837	1,615	165,489.567	177,050.163	254,641.000	420,130.567
FEBRUARY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,353	138,659.301	1,384	141,842.133	159,535.199	298,194.500	440,036.633
MARCH TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,851	189,683.188	1428	146,408.368	143,592.272	333,275.460	479,683.828
APRIL TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1552	159,040.086	1707	174,976.449	152,671.174	311,711.260	486,687.709
MAY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,688	173,005.499	1527	156,497.438	128,169.301	301,174.800	457,672.238
JUNE TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,474	151,080.451	911	93,328.188	79,766.849	230,847.300	324,175.488
JULY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
865	88,678.690	481	49,315.662	38,615.510	127,294.200	176,609.862
AUGUST TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1491	152,789.458	1089	111,593.742	90,138.642	242,928.100	354,521.842
SEPTEMBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,377	141,122.721	1373	140,760.482	112,134.259	253,256.980	394,017.462
OCTOBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
889	91,077.019	899	92,096.755	98,126.081	189,203.100	281,299.855
NOVEMBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
644	65,996.727	656	67,212.233	42,498.073	108,494.800	175,707.033
DECEMBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
799	81,872.767	876	89,801.265	52,281.433	134,154.200	223,955.465

2008 ANNUAL RAIL AND STORAGE CARGO ACTIVITY ENVIRONMENTAL REPORT

	Bay#1		Bay#2		Bay#3		Bay#4		Bay#5		Bay#6		Totals	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
January	11,512.723	8,795.200	11,493.665	1,152.000	18,076.130	32,036.400	5,645.690	6,402.728	54,436.294	53,551.898	64,325.065	75,111.937	165,489.567	177,050.163
February	0.000	12,163.650	0.000	7,246.800	19,176.438	18,793.328	8,666.741	2,027.600	25,533.438	15,006.000	88,465.816	104,297.821	141,842.433	159,535.199
March	14,649.105	10,482.220	7,851.730	5,581.600	9,295.899	14,333.820	10,523.513	11,877.432	44,327.872	7,421.200	59,760.249	93,896.000	146,408.368	143,592.272
April	8,367.463	12,786.060	5,049.415	7,301.600	20,757.085	20,682.400	11,551.276	17,980.483	27,298.220	0.000	101,952.990	93,920.631	174,976.449	152,671.174
May	10,019.062	0.000	15,074.074	6,499.600	9,819.232	10,967.200	11,242.634	2,010.800	21,293.503	47,381.073	89,048.933	61,310.628	156,497.438	128,169.301
June	3,815.755	3,920.070	9,600.712	7,906.000	6,611.252	4,524.400	5,360.533	3,214.209	720.995	0.000	67,218.941	60,202.170	93,328.188	79,766.849
July	5,148.252	9,625.593	7,328.739	4,004.000	12,087.261	2,433.058	3,610.412	5,679.932	17,228.174	9,778.527	3,912.824	7,094.400	49,315.662	38,615.510
August	7,536.708	8,519.200	7,531.364	4,497.600	15,659.519	12,684.226	8,451.741	12,703.916	12,685.528	0.000	59,728.882	51,753.700	111,593.742	90,158.642
September	17,033.598	16,113.300	7,746.158	7,914.800	16,692.156	3,565.362	13,627.379	13,588.439	21,246.599	18,052.000	64,414.594	52,900.358	140,760.484	112,134.259
October	14,522.790	11,032.254	4,745.008	8,525.997	19,550.939	26,053.971	14,970.271	17,330.216	18,585.719	0.000	19,692.028	35,183.643	92,066.755	98,126.081
November	5,887.991	9,010.400	10,637.651	4,496.000	10,760.888	2,930.050	11,464.062	4,016.800	10,096.944	16,404.000	18,364.697	5,640.823	67,212.233	42,498.073
December	10,114.434	5,802.666	5,245.543	7,249.200	42,724.486	32,838.741	8,373.829	6,012.400	21,696.951	0.000	1,646.022	378.426	89,801.265	52,281.433
TOTALS	108,607.881	108,250.613	92,304.059	72,375.197	201,211.285	181,842.956	113,488.081	102,844.955	275,150.237	167,594.698	638,531.041	641,690.537	1,429,292.584	1,274,598.956

**KINDER MORGAN BULK TERMINAL 5
ROLLING 12-MONTH EMISSIONS**

MONTH/YEAR	COMBINED TOTAL - SHORT TONS HANDLED	PM₁₀ EMISSIONS - SHORT TONS PER MONTH
January, 2008	420,130.57	0.0434
February, 2008	440,036.63	0.0504
March, 2008	479,683.83	0.0571
April, 2008	486,687.71	0.0522
May, 2008	457,672.24	0.0311
June, 2008	324,175.49	0.0261
July, 2008	176,609.85	0.0160
August, 2008	354,521.84	0.0287
September, 2008	394,017.46	0.0291
October, 2008	281,299.86	0.0235
November, 2008	175,707.03	0.0147
December, 2008	223,955.47	0.0303
12 Month Totals:	4,214,497.97	0.4586
	Permit Limit:	14.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

November 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	91,129.78	3	0.0062
Storage to Vessel	PM10	4.60E-05	101,910.30	5	0.0117
Rail Direct to Vessel	PM10	4.60E-05	131,103.50	7	0.0211
OTHER PRODUCTS¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
(no storage of other products)					
Total Amount Handled:			324,143.58		0.0390

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

December 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	112,152.70	3	0.0077
Storage to Vessel	PM10	4.60E-05	122,236.71	5	0.0140
Rail Direct to Vessel	PM10	4.60E-05	53,511.95	7	0.0086
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			287,901.36		0.0303

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

January 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	165,489.57	3	0.0114
Storage to Vessel	PM10	4.60E-05	177,050.16	5	0.0200
Rail Direct to Vessel	PM10	4.60E-05	77,590.84	7	0.0120
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:				420,130.567	0.0434

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

February 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	141,842.13	3	0.0098
Storage to Vessel	PM10	4.60E-05	159,535.20	5	0.0183
Rail Direct to Vessel	PM10	4.60E-05	138,659.30	7	0.0223
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			440,036.63		0.0504

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

March 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	146,408.37	3	0.0101
Storage to Vessel	PM10	4.60E-05	143,592.27	5	0.0165
Rail Direct to Vessel	PM10	4.60E-05	189,683.19	7	0.0305
OTHER PRODUCTS¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
(no storage of other products)					
Total Amount Handled:			479,683.83		0.0571

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

April 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	174,976.45	3	0.0121
Storage to Vessel	PM10	4.60E-05	152,671.17	5	0.0176
Rail Direct to Vessel	PM10	4.60E-05	159,040.09	7	0.0226
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			486,687.71		0.0522

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

MAY 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	110,342.44	3	0.0038
Un-Treated (White)	PM10	4.60E-05	46,155.00	3	0.0032
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	108,691.70	5	0.0062
Un-Treated (White)	PM10	4.60E-05	19,477.60	5	0.0022
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	152,099.90	7	0.0122
Un-Treated (White)	PM10	4.60E-05	20,905.60	7	0.0034
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			457,672.24		0.0311

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

June 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	67,939.94	3	0.0023
Un-Treated (White)	PM10	4.60E-05	25,388.25	3	0.0018
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	60,202.17	5	0.0035
Un-Treated (White)	PM10	4.60E-05	19,564.68	5	0.0022
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	100,209.73	7	0.0081
Un-Treated (White)	PM10	4.60E-05	50,870.72	7	0.0082
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

July 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	21,140.99	3	0.0007
Un-Treated (White)	PM10	4.60E-05	28,174.66	3	0.0019
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	16,872.93	5	0.0010
Un-Treated (White)	PM10	4.60E-05	21,742.58	5	0.0025
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	55,241.87	7	0.0044
Un-Treated (White)	PM10	4.60E-05	33,436.82	7	0.0054
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

August 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	72,414.41	3	0.0025
Un-Treated (White)	PM10	4.60E-05	39,179.33	3	0.0027
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	51,753.70	5	0.0030
Un-Treated (White)	PM10	4.60E-05	38,384.94	5	0.0044
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	105,767.30	7	0.0085
Un-Treated (White)	PM10	4.60E-05	47,022.16	7	0.0076
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

September 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	85,661.19	3	0.0030
Un-Treated (White)	PM10	4.60E-05	55,099.29	3	0.0038
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	70,952.36	5	0.0041
Un-Treated (White)	PM10	4.60E-05	41,181.90	5	0.0047
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	113,720.04	7	0.0092
Un-Treated (White)	PM10	4.60E-05	27,402.68	7	0.0044
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

October 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	38,277.75	3	0.0013
Un-Treated (White)	PM10	4.60E-05	53,819.01	3	0.0037
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	35,183.64	5	0.0020
Un-Treated (White)	PM10	4.60E-05	62,942.44	5	0.0072
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	67,693.96	7	0.0054
Un-Treated (White)	PM10	4.60E-05	23,383.06	7	0.0038
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

November 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	28,461.64	3	0.0010
Un-Treated (White)	PM10	4.60E-05	38,750.59	3	0.0027
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	22,044.82	5	0.0013
Un-Treated (White)	PM10	4.60E-05	20,453.25	5	0.0024
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	40,242.78	7	0.0032
Un-Treated (White)	PM10	4.60E-05	25,753.95	7	0.0041
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

December 2008

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	23,342.97	3	0.0008
Un-Treated (White)	PM10	4.60E-05	66,458.29	3	0.0046
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	378.43	5	0.0000
Un-Treated (White)	PM10	4.60E-05	51,903.01	5	0.0060
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	46,210.37	7	0.0037
Un-Treated (White)	PM10	4.60E-05	35,662.39	7	0.0057
OTHER PRODUCTS¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

From: Origin ID: MRIA (503) 285-4200
Katrina Greene
Kinder Morgan Terminals, Inc
15550 N Lombard Street
Portland, OR 97203



Ship Date: 23JAN09
ActWgt: 2.0 LB
CAD: 8280934/INET9011
Account#: S *****

Delivery Address Bar Code



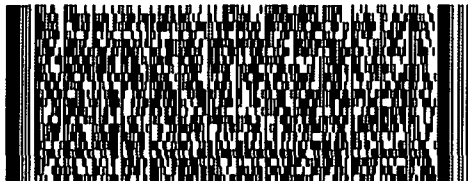
SHIP TO: (503) 285-4200 BILL SENDER
Ms. Tina Leppaluoto
DEQ- NWR East Side Office
1550 NW EASTMAN PKWY STE 290

Ref #
Invoice #
PO #
Dept #

GRESHAM, OR 97030

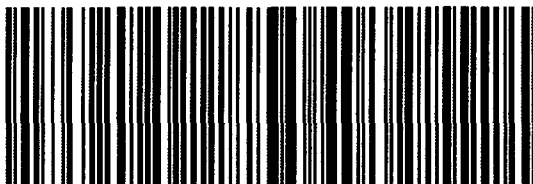
TRK# 7962 8187 7821
0201

MON - 26JAN A2
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86 PDXA

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Kinder Morgan Terminals, Inc.

January 22, 2008

Ms. Tina Leppaluoto
Department of Environmental Quality
NWR – East Side Office
1550 NW Eastman Parkway
Suite 290
Gresham, Oregon 97030

Re: Air Contaminant Discharge Permit No. 26-3071

Dear Ms. Leppaluoto:

I have enclosed an original and two (2) copies of Kinder Morgan Terminals, Inc. annual Air Contaminant Discharge Report for our facility located at Terminal 5 in Portland, Oregon.

If you should have any questions regarding the report, please call Brent McMullin or myself at 503-285-4200.

Sincerely,

A handwritten signature in black ink, appearing to read "Gene Ellis".

Gene Ellis
Terminal Manager
Kinder Morgan Bulk Terminals, Inc.

Cc: Air Permit Annual Report File

GE:jaw

KINDER MORGAN TERMINALS, INC.

Portland Bulk Terminals, Terminal 5
Air Contaminant Discharge Permit No. 26-3071
Annual Report to Oregon Department of Environmental Quality

Instructions: This form [there are five (5) pages to the form] must be completed and submitted to the DEQ no later than January 15th of each year for operations during the previous calendar year. Mail the original and two copies to: Department of Environmental Quality, 2020 SW 4th Avenue, Suite No. 400, Portland, OR 97201-5884.

Mail a copy of the report to Corporate Environmental Affairs in Sorrento.

This report is for the calendar year **January 1, 2007 to December 31, 2007.**

- A. In the space below, or on a separate sheet of paper attached to this form, list the amounts (tons/year) and types of commodities shipped and received during the report year.

Refer to attached sheets

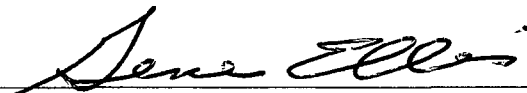
- B. Summarize below (or attach separate sheets) all fugitive dust complaints received by PBT-5 from any public citizen during the report year.

None

- C. Attach to this sheet an Upset Log sheet for all excess emissions that occurred during the report year. **See attached**

If no excess emissions occurred during the report year, check the statement below and sign your name where indicated and enter the date and your title.

THIS IS TO CERTIFY THAT NO EXCESS EMISSIONS OCCURRED AT THIS FACILITY DURING THE REPORT YEAR.

Signed 
Gene Ellis

Date **January 22, 2008**

Title **Terminal Manager**

- D. In the space below, explain any permanent changes made in terminal processes and/or products handled which would affect air contaminant emissions and indicate when the changes were made.

If no such changes were made in the report year, check here: ☒ X ☐ NONE

- E. List on this page (or attach a separate sheet showing) all maintenance performed on air pollution equipment during the report year.

Refer to attached

DOCUMENT ALL REPAIRS AS REQUIRED IN THE AIR CONTAMINANT DISCHARGE PERMIT EFFECTIVE 7/11/02.
Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet

January

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system	Unplugged system			
DC-1B	Unplugged system	Unplugged system			
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system	Unplugged system		
DC-6	Unplugged system	Unplugged system	Unplugged system		
DC7-A					
DC7-B	Unplugged system				

February

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system				
DC-1B	Unplugged system				
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B	Unplugged system				

March

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system				
DC-1B	Unplugged system				
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B	Unplugged system				

April

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system				
DC-1B	Unplugged system				
DC-2	Unplugged system	Unplugged system	Unplugged system		
DC-3	Unplugged system	Unplugged system	Unplugged system		
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system	Unplugged system		
DC-6	Unplugged system	Unplugged system	Unplugged system		
DC7-A					
DC7-B	Unplugged system				

May

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

June

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system				
DC-1B	Unplugged system				
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B	Unplugged system				

July

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system	Unplugged system		
DC-3	Unplugged system	Unplugged system	Unplugged system		
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system	Unplugged system		
DC-6	Unplugged system	Unplugged system	Unplugged system		
DC7-A					
DC7-B					

August Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system	Unplugged system		
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

September Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

October Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	AIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Change Bags				
DC-1B	Change Bags				
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system	Unplugged system		
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system	Unplugged system		
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B	Unplugged system				

November Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

December Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system	Unplugged system		
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

REPAIR LOG Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Balanced Blowers				
DC-1B	Balanced Blowers				
DC-2	Balanced Blowers				
DC-3	Balanced Blowers				
DC-4	Balanced Blowers				
DC-5	Replaced Rotary Valve	Welded up holes in Transfer Chute	Balanced Blowers		
DC-6	Balanced Blowers				
DC7-A					
DC7-B	Balanced Blowers				

TOTAL CARGO HANDLED 2007

RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
16,166	1,667,350.793	9,932	1,018,013.385	1,071,520.542	2,738,871.335	3,756,884.720
ADJUSTMENT					0	
ACTUAL CARGO HANDLED					2,738,871.335	
JANUARY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1146	117,506.478	1,464	150,046.709	54,081.722	171,588.200	321,634.909
FEBRUARY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,743	189,634.741	730	75,247.670	115,272.159	304,906.900	380,154.570
MARCH TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,349	137,644.502	645	65,798.493	98,837.898	236,482.400	302,280.893
APRIL TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1223	125,351.420	901	92,305.595	103,395.925	228,747.345	321,052.940
MAY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,036	106,148.678	1226	125,629.611	116,932.323	223,081.001	348,710.612
JUNE TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,081	110,796.459	783	80,264.665	95,813.341	206,609.800	286,874.465
JULY TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,527	156,469.077	598	61,244.871	64,825.023	221,294.100	282,538.971
AUGUST TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1281	131,274.750	434	44,498.259	52,192.350	183,467.100	227,965.359
SEPTEMBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1,627	166,802.162	718	73,617.947	90,572.438	257,374.600	330,992.547
OCTOBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
2,352	241,107.080	450	46,077.078	55,450.349	296,557.429	342,634.507
NOVEMBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
1279	131,103.500	889	91,129.783	101,910.300	233,013.800	324,143.583
DECEMBER TOTALS						
RAIL TO SHIP		RAIL TO STORAGE		STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded		
522	53,511.946	1094	112,152.704	122,236.714	175,748.660	287,901.364

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	Bay#1		Bay#2		Bay#3		Bay#4		Bay#5		Bay#6		Totals	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
January	3,286.248	0.000	0.000	0.000	36,151.487	19,255.200	29,297.600	4,013.672	82,311.374	30,812.850	N/A	N/A	151,046.709	54,081.722
February	12,030.891	11,496.662	6,891.936	4,021.600	7,840.241	25,770.292	1,742.103	23,206.775	46,742.499	50,776.830	N/A	N/A	75,247.670	115,272.159
March	3,698.568	11,193.661	102.468	4,021.600	10,101.901	25,780.600	14,725.650	510.400	37,169.906	63,559.205	N/A	N/A	65,798.493	105,065.466
April	3,092.864	3,497.325	1,650.555	0.000	6,294.296	17,430.000	2,063.097	9,357.600	79,204.783	73,111.000	N/A	N/A	92,305.595	103,395.925
May	6,492.539	11,006.200	206.272	6,721.700	29,318.197	17,757.600	17,125.780	15,018.500	72,486.823	66,428.323	N/A	N/A	125,629.611	116,932.323
June	2,468.315	0.000	3,189.116	0.000	12,901.062	25,123.231	10,399.538	5,516.000	51,306.634	60,668.510	N/A	N/A	80,264.665	91,307.741
July	5,981.373	0.000	5,259.680	9,974.807	17,045.158	13,090.200	102.988	0.000	32,855.672	41,760.018	N/A	N/A	61,244.871	64,825.023
August	2,168.206	0.000	4,846.614	0.000	12,695.187	14,305.030	0.000	0.000	24,788.252	37,887.320	N/A	N/A	44,498.259	52,192.350
September	2,266.210	10,042.176	9,376.613	0.000	12,865.425	18,414.062	11,335.140	20,974.800	37,774.559	41,141.400	N/A	N/A	73,617.947	90,572.438
October	8,351.432	0.000	4,332.560	7,001.200	412.886	4,211.370	3,303.700	5,638.409	29,678.500	38,599.370	N/A	N/A	46,077.078	55,450.349
November	722.664	4,282.400	3,613.340	9,646.000	28,015.093	17,894.000	10,369.903	10,031.936	48,408.783	60,055.964	40,785.746	0.000	131,915.529	101,910.300
December	0.000	10,263.504	6,393.070	0.000	15,054.970	10,808.800	11,609.835	9,146.200	74,978.049	49,514.049	30,844.038	38,863.184	138,879.962	118,595.737
													0.000	0.000
TOTALS	50,559.310	61,781.928	45,862.224	41,386.907	188,695.903	209,840.385	112,075.334	103,414.292	617,703.834	614,314.837	71,629.784	38,863.184	1,086,526.389	1,069,601.533

KINDER MORGAN BULK TERMINAL 5 ROLLING 12-MONTH EMISSIONS

MONTH/YEAR	COMBINED TOTAL - SHORT TONS HANDLED	PM ₁₀ EMISSIONS - SHORT TONS PER MONTH
January, 2007	321,634.91	0.0354
February, 2007	380,154.57	0.0488
March, 2007	302,280.89	0.0362
April, 2007	321,052.94	0.0382
May, 2007	348,710.61	0.0392
June, 2007	286,874.47	0.0343
July, 2007	282,538.97	0.0367
August, 2007	227,965.36	0.0301
September, 2007	330,992.55	0.0422
October, 2007	342,634.51	0.0482
November, 2007	324,143.58	0.0390
December, 2007	287,901.36	0.0303
12 Month Totals:	3,756,884.72	0.4586
	Permit Limit:	14.0000

Calculation of Monthly Emissions from Material Handling System at Terminal 5

January 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	150,046.71	3	0.0103
Storage to Vessel	PM10	4.60E-05	54,081.72	5	0.0062
Rail Direct to Vessel	PM10	4.60E-05	117,506.48	7	0.0189
OTHER PRODUCTS¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
(no storage of other products)					
Total Amount Handled:			321,634.91		0.0354

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

February 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	75,247.67	3	0.0051
Storage to Vessel	PM10	4.60E-05	115,272.16	5	0.0132
Rail Direct to Vessel	PM10	4.60E-05	189,634.74	7	0.0305
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			380,154.57		0.0488

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

March 2006

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	65,798.49	3	0.0045
Storage to Vessel	PM10	4.60E-05	137,644.50	5	0.0158
Rail Direct to Vessel	PM10	4.60E-05	98,837.90	7	0.0159
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			302,280.89		0.0362

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

April 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	92,305.60	3	0.0063
Storage to Vessel	PM10	4.60E-05	103,395.93	5	0.0118
Rail Direct to Vessel	PM10	4.60E-05	125,351.42	7	0.0201
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			321,052.94		0.0382

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

MAY 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	125,629.61	3	0.0086
Storage to Vessel	PM10	4.60E-05	116,932.32	5	0.0134
Rail Direct to Vessel	PM10	4.60E-05	106,148.68	7	0.0170
OTHER PRODUCTS¹					
Rail Direct to Vessel	PM10	4.60E-05		7	0.0000
(no storage of other products)					
Total Amount Handled:			348,710.61		0.0392

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

June 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	80,264.67	3	0.0055
Storage to Vessel	PM10	4.60E-05	95,813.34	5	0.0110
Rail Direct to Vessel	PM10	4.60E-05	110,796.46	7	0.0178
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			286,874.47		0.0343

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

July 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	61,244.87	3	0.0042
Storage to Vessel	PM10	4.60E-05	64,825.02	5	0.0074
Rail Direct to Vessel	PM10	4.60E-05	156,469.08	7	0.0251
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			282,538.97		0.0367

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

August 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	44,498.26	3	0.0030
Storage to Vessel	PM10	4.60E-05	52,192.35	5	0.0060
Rail Direct to Vessel	PM10	4.60E-05	131,274.75	7	0.0211
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			227,965.36		0.0301

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

September 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	73,617.95	3	0.0050
Storage to Vessel	PM10	4.60E-05	90,572.44	5	0.0104
Rail Direct to Vessel	PM10	4.60E-05	166,802.16	7	0.0268
OTHER PRODUCTS¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
(no storage of other products)					
Total Amount Handled:			330,992.55		0.0422

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

October 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	46,077.08	3	0.0031
Storage to Vessel	PM10	4.60E-05	55,450.35	5	0.0063
Rail Direct to Vessel	PM10	4.60E-05	241,107.08	7	0.0388
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			342,634.51		0.0482

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

November 2007

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	91,129.78	3	0.0062
Storage to Vessel	PM10	4.60E-05	101,910.30	5	0.0117
Rail Direct to Vessel	PM10	4.60E-05	131,103.50	7	0.0211
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			324,143.58		0.0390

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

Calculation of Monthly Emissions from Material Handling System at Terminal 5

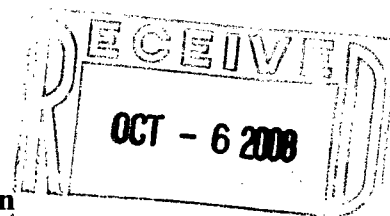
December 2006

Emission Source	Emission Type	Controlled Emission Factor E lbs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	112,152.70	3	0.0077
Storage to Vessel	PM10	4.60E-05	122,236.71	5	0.0140
Rail Direct to Vessel	PM10	4.60E-05	53,511.95	7	0.0086
OTHER PRODUCTS¹					
Rail Direct to Vessel (no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Total Amount Handled:			287,901.36		0.0303

Notes:

1. No other products are currently handled, however, other dry bulk products may be handled in the future.

DEQ INSPECTION REPORT
Northwest Region – Air Quality Section



Facility Name and Address: Kinder Morgan Bulk Terminals, Inc. 15550 N. Lombard St. Portland, OR 97203	Permit Number: 26-3071 County: Multnomah
---	---

Inspection Date/Time: 9-09-2008 9:00 am	Reason for Inspection: <i>(check one)</i>	Regularly scheduled inspection	
		Complaint follow-up	
		Other (specify) verify compliance with white product while loading a ship.	X

Permit Type: <i>(check one)</i>	ACDP	X	Inspection Type: <i>(check two)</i>	FCE/PCE (specify)	
	Title V			State Inspection	X
				Announced	X
				Unannounced	

Inspector(s): <i>(Name, Title and Agency)</i>	Tina Leppaluoto, Natural Resource Specialist
Air Quality Manager	Ed Druback, Northwest Region (503) 229-5151

Facility Representative(s): <i>(Name, Title and Phone #)</i>	Neil Maunu, Assistant Terminal Manager, 503-285-4200 Jack Waller, Terminal Manager, 503-285-4200 Brent McMullin, Regional EHS Manager, 503-936-5622
--	---

Overview of Facility

The permittee operates a bulk fertilizer products marine loading facility at the Port of Portland's Terminal 5. The facility primarily handles potash, sulfate of potash, urea and soda ash. Construction of the facility began in 1986 by the Port of Portland and by 1996 construction was resumed by the permittee and completed for operations in 1997.

Process and Control Devices

- Existing air contaminant sources at the facility consist of the following:

Process	Baghouses	Max. Speed	Installed
Ship loader	2	19,250 CFM	2000
Bottom dump	2, with cyclones	27,100 CFM	2000
Tower 3	1, with cyclone	11,000 CFM	2000

Tower 4	1, with cyclone	10,000 CFM	2000
Tower 5	1, with cyclone	10,000 CFM	2000
Tower 6	1, with cyclone	13,000 CFM	2000
Tower 7	1	5,000 CFM	2000

Pre-inspection File Review

A review of the facility file indicates that the annual report was received and found to be in compliance with the current permit conditions. The facility has not received any complaints and no enforcement actions have been taken against the facility since the last permit renewal. The facility was inspected on 9/9/05 and found to be in compliance with the permit conditions.

Walk-through of Facility

The facility was operating at the time of the inspection a ship was being loaded with 7,000 metric tons of white standard product. One baghouse is used when loading white and red product, a backup baghouse is in place for use during maintenance of the original baghouse. The pressure is monitored during all operations of the baghouses during the ship loadings. The opacity was not visible during the ship loading although, when the spout was being brought up out of the haul of the ship particulate of 10 to 12% was being observed. The facility's baghouses have been plugging up with product during operations of loading and unloading. The permittee has installed air cannons back in May for each of the cyclones which keeps the lines free of accumulation of the product. The baghouses are operating better with less plugging now that the air cannons are in place. A maintenance schedule is being put together over the next couple of months for the air cannons in order to maintain the operations of the new equipment. The air cannons are placed at the first dust collector #4 from storage, two are placed at the rail pit, one was placed at tower 3, one was placed at the ship loader and one was placed at the dock.

During the ship loading of white standard product it was observed that product was coming off of the conveyer from tower 3. It was inspected immediately and found to have a hole worn in the flange. The operators did a quick fix to cover up the hole to stop the product from falling through the hole onto the ground. Tower 3 is equipped with containment in case of product loss during loading operations. Since there was a large amount of contaminated product on the ground, it will be swept up, bagged and taken to the landfill. For small amounts the contaminated product is washed down into the containment area which then goes to a filtered tank and metered slowly to the City waters. West Coast Marine comes in before each product change and washes down the excess material to prevent cross contamination. The conveyer was currently set to run at 2,000 tons an hour maximum for white product. This is done to avoid plugging of the baghouse during the loading of the product.

The facility was well maintained with only a few areas of product build up which is cleaned up after each shift. C-7 is one areas of concern when loading a ship, it was

mentioned by the assistant manager during the inspection that a tarp will be put in place to contain the product that falls from the belt onto the ground. Currently it is fenced off so facility operators do not track it through the facility grounds. If winds are present during the loading of the product this product can be blown around, it needs to be controlled at all times. The thought of putting a tarp in place to keep the product contained until it could be cleaned up may help.

The annual compliance report was discussed to verify the permit conditions were being met. The annual reports will be more detailed for the equipment operations and the process of shutdown to make sure emissions are being controlled during facility operations. The permittee will also include more details on the products that are being used and the emissions from those products.

Compliance status of facility

Check one of the following:

<input checked="" type="checkbox"/>	Facility is in compliance with the permit conditions described above.
<input type="checkbox"/>	Facility is not in compliance with one or more of the permit conditions described above (provide additional detail below).

cc: Brent McMullin, Regional Environmental,
Health & Safety Manager
Kinder Morgan Terminals, Inc.
West Coast Region
1057 Officers Row
Vancouver, WA 98661



INDUSTRIAL HYGIENE SURVEY

Potassium Chloride Dust Monitoring

Submitted to:

SGS NA Minerals
15550 N Lombard
Port of Portland - Terminal 5
Portland, Oregon 97203

Submitted by:

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon 97224

8-61M-118260

June 2008



June 25, 2008

8-61M-118260

David B. Nagel
Portland Area Manager
Minerals Services Division
SGS NA Minerals
15550 N Lombard - Terminal 5
Portland, Oregon 97203

Dear Mr. Nagel:

**Re: Industrial Hygiene Survey
Potassium Chloride Dust Monitoring
Port of Portland - Terminal 5
Portland, Oregon**

AMEC Earth & Environmental, Inc. (AMEC) is pleased to submit the final Industrial Hygiene Survey Report documenting results of recent air monitoring for potassium chloride as total dust. The survey, conducted on May 15, 2008, examined potential exposure to potassium chloride as total dust during the unloading of railcars and loading of a ship at the Port of Portland's Terminal 5.

AMEC appreciates the opportunity to be of service to you. Please contact us at (503) 639-3400 if you have any questions concerning this report.

Sincerely,

AMEC Earth & Environmental, Inc.

Rob Roloson
Industrial Hygienist/Environmental Scientist

Garry Rossing
Senior Associate

Attachments

RR/cw

AMEC Earth & Environmental, Inc.
7376 SW Durham Road
Portland, Oregon
USA 97224
Tel +1 (503) 639-3400
Fax +1 (503) 620-7892

www.amec.com

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Minerals\861m118260 Industrial Hygiene Report
SGS NA Minerals.doc

KMB00009924



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2.0 BACKGROUND INFORMATION AND OBSERVATIONS	1
3.0 SAMPLING METHODOLOGY	2
3.1 Personal Air Monitoring	2
3.2 Area Air Monitoring	2
4.0 RESULTS	2
5.0 DISCUSSION	3
6.0 RECOMMENDATIONS	3
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List of Tables

Table 1	Potassium Chloride Sampled as Total Dust Results
Table 2	DustTrak™ Total Dust Results Conveyor 12 Graph

List of Appendices

Appendix A	Photograph Log
Appendix B	Laboratory Analysis Report



1.0 INTRODUCTION

At the request of Mr. David Nagel, Portland Area Manager for SGS NA Minerals (SGS), AMEC Earth & Environmental, Inc. (AMEC) performed an industrial hygiene survey to evaluate the potential total dust exposure of employees who collect composite samples of potassium chloride products, as they are unloaded from railcars and loaded onto a ship. Potassium chloride was sampled as total dust.

2.0 BACKGROUND INFORMATION AND OBSERVATIONS

SGS's services range from quality and quantity inspection and testing to advanced process control which optimizes the recovery of metals in processing plants through the implementation of expert systems. In support of their quality and quantity inspection and testing services, SGS employees often come into direct contact with mineral products.

The industrial hygiene survey was conducted on May 15, 2008 during the unloading of WSTD White product from approximately 31 Canotex railcars and the loading of G5I5 product onto a ship at Terminal 5 of the Port of Portland.

The WSTD White product was unloaded onto a conveyor system that begins underground and transports the product past a dust collector, emerging inside a sampling shed, to deposit the product into a large storage building. An SGS employee (Koury Sek) was standing inside the sampling shed collecting samples of the WSTD White product approximately every 5 minutes during the unloading process. A personal exposure sample was collected during this process and a TSI DustTrak™ Model 8520 Aerosol Monitor was placed in the sampling shed as an area monitor.

The G5I5 product was loaded by a "reclaimer" onto a conveyor system that begins inside the large storage building and transports the product past a sampling station and continues outside to load a ship. The sampling station was located inside the storage building "upstream" of the reclaimer. An SGS employee (Eugene Evett) was standing at the sampling station collecting samples of the G5I5 product approximately every 5 minutes during the loading process. A personal exposure sample was collected during this process. DustTrak™ data was unavailable for this process.

Sample results were compared to regulatory standards established by the State of Oregon's Occupational Safety and Health Division (OR-OSHA) Permissible Exposure Limits (PELs) for air contaminants as well as the American Conference of Governmental Industrial Hygienist (ACGIH®) threshold limit values (TLVs®).

Photographs of the sampling locations are located in Appendix A of this report.



3.0 SAMPLING METHODOLOGY

Air monitoring pumps were calibrated to an airflow rate in accordance with the sample method protocols both before and after sampling with a primary standard. An average of the pre- and post-calibration flow rates were used to calculate final sample volumes from the total elapsed sampling times. A quality control blank sample was prepared in the same manner as the other samples, with zero air volume. No samples were invalidated over the course of this survey. Samples remained under AMEC control until shipped via Federal Express to Bureau Veritas North America located in Lake Zurich, Illinois. The Bureau Veritas North America laboratory is accredited by the American Industrial Hygiene Association (AIHA) for analysis of samples by approved Occupational Safety and Health Administration (OSHA) and the National Institute of Occupational Safety and Health (NIOSH) methods.

Copies of analytical results are included in Appendix B.

3.1 Personal Air Monitoring

The personal exposure air samples were collected according to the OSHA protocol using a medium-flow personal air monitoring pump pre-calibrated to approximately two liters per minute and connected to a 37 millimeter 0.8 micron matched weight mixed cellulose filter. The personal sample filters were secured to the employee's right or left lapel in the worker's breathing zone. Filter #27039737 was attached outside of the loose fitting Powered Air Purifying Respirator (PAPR) hood, within the breathing zone, according to OSHA protocol.

3.2 Area Air Monitoring

The area air samples were collected with a TSI DustTrak™ Model 8520 Aerosol Monitor. The TSI DustTrak™ was placed within the sampling stations near the employee and monitored at breathing level.

A graph of the TSI DustTrak™ data is included in Table 2.

4.0 RESULTS

For purposes of OR-OSHA compliance, no overexposures to total dust were documented on any of the samples taken over the course of the survey. When calculated for an 8-hour Time Weight Average (TWA), all personal exposure results show concentrations of total dust below the OR-OSHA PEL for Total Particulates (10 milligrams per cubic meter [mg/m^3]) and ACGIH® TLV® for inhalable particles 10 mg/m^3 .



The results show that one personal sample for total dust (Sample #27039737 Eugene Evett) documented an exposure above the OR-OSHA PEL 10 mg/m³ and the ACGIH® TLV® 10 mg/m³ *during the sample period*, however, the calculated 8-hour TWA shows a total dust exposure of 4.58 mg/m³, less than half of the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³.

Sample results are summarized in Table 1.

5.0 DISCUSSION

The personal exposure sample #27039737 for Eugene Evett shows that *during the sample period* total dust exposure was above the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. This indicates that if an employee was exposed to the same concentration of total dust for an 8-hour shift then the exposure would be above the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. The elapsed time for this sample (Sample #: 27039737 Eugene Evett) was 200 minutes in duration and representative of the job task. When the result is calculated for an 8-hour TWA the concentration of total dust for this sample (Sample #27039737 Eugene Evett) is 4.58 mg/m³, less than half of the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. This indicates that if an employee was exposed to the same concentration of total dust *for a similar duration of time*, then the exposure would be below OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. Eugene Evett was wearing a 3M Air-Stream BE-10 PAPR with a regular size loose fitting hood that provides a NIOSH approved protection factor of 25. This level of protection exceeds what is required by OR-OSHA and would protect a wearer up to 25 times the OR-OSHA PEL or up to 250 mg/m³ of total dust.

All other personal and area sample results show concentrations of total dust below the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³.

6.0 RECOMMENDATIONS

Based on the data collected during this survey, AMEC recommends the following:

1. Inform employees impacted by this evaluation of the monitoring results in accordance with OR-OSHA Hazard Communication Standard (1910.1200).
2. Continue to use administrative controls, such as limiting exposure time, to reduce total dust exposures.
3. Continue to offer employees the option to wear N-95 nuisance dust masks and continue to encourage the use of the PAPR to reduce nuisance dust/smells associated with potassium chloride sampling.



4. Perform additional exposure monitoring when there has been any change in the production process, raw materials, equipment, personnel, work practices, or control methods that may result in new or additional exposures to total dust.
5. Maintain monitoring records in accordance with the OSHA recordkeeping standards. (29 CFR 1910.1020)

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments regarding this report, please contact the undersigned at (503) 639-3400.

AMEC Earth & Environmental, Inc.

A handwritten signature in black ink, appearing to read "Rob Roloson", written over a horizontal line.

Rob Roloson
Environmental Scientist/Industrial Hygienist

A handwritten signature in black ink, appearing to read "Garry Rossing", written over a horizontal line.

Garry Rossing
Senior Associate

RR/cw



LIMITATIONS

This report was prepared exclusively for SGS NA Minerals by AMEC Earth & Environmental, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Industrial Hygiene Survey is intended to be used by SGS NA Minerals only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

The findings contained herein are relevant to the dates of the AMEC Site visit and should not be relied upon to represent conditions at later dates. In the event that changes in the nature, usage, or layout of the property or nearby properties are made, the conclusions and recommendations contained in this report may not be valid. If additional information becomes available, it should be provided to AMEC so the original conclusions and recommendations can be modified as necessary.

TABLES

TABLE 1
SGS NA Minerals
15550 N Lombard
Port of Portland - Terminal 5
Portland, Oregon 97203
Potassium Chloride Sampled as Total Dust Results

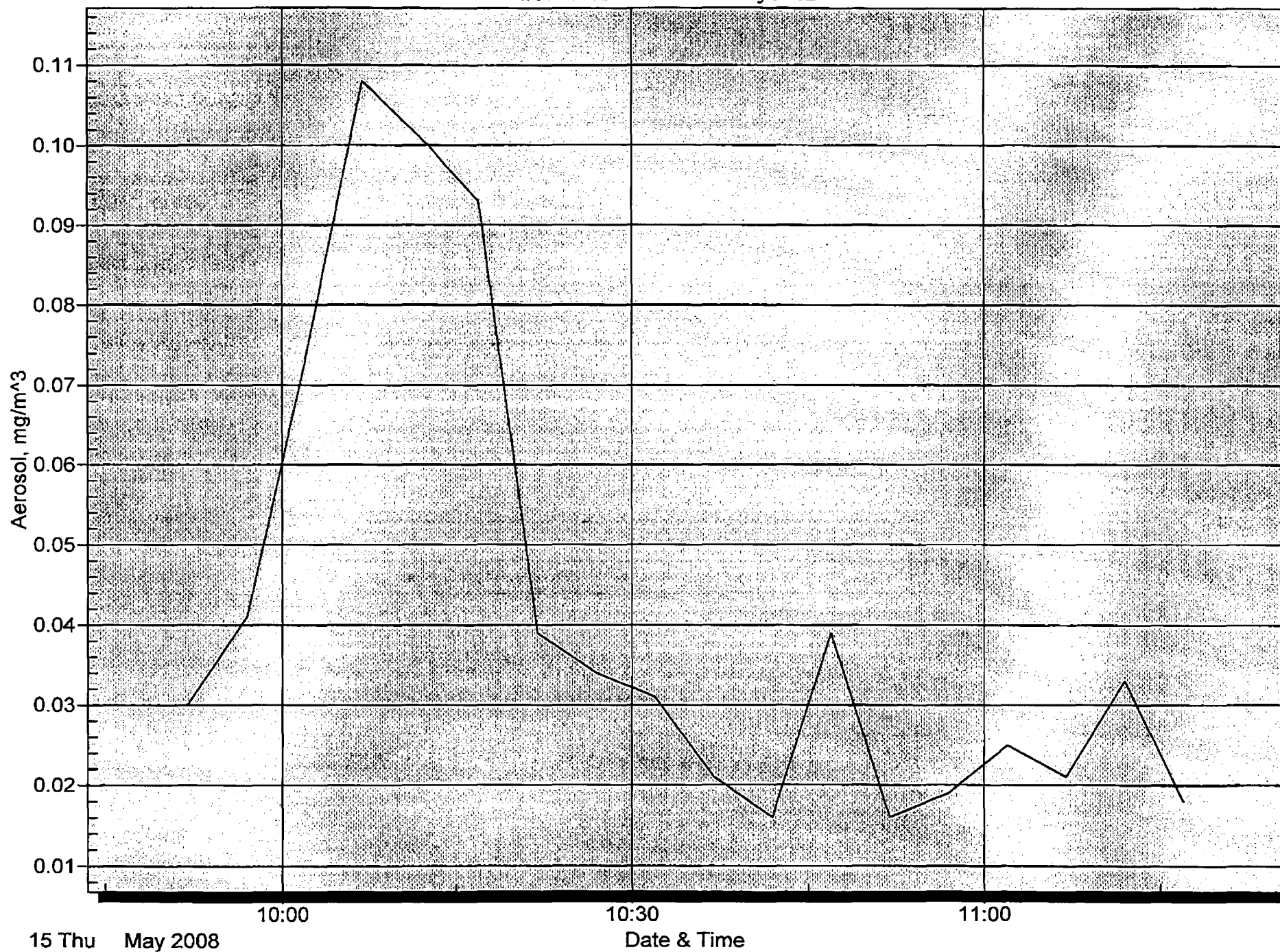
Sample #	Time On/Off Total Minutes	Notes	Sample Results Total Dust (mg/m ³)	Time Weighted Average Sample Results Total Dust (mg/m ³)
27039736	Time on: 8:35 am Time off: 10:18 am Total Min: 103 min	Personal Sample: Koury Sek working in the sampling shed on Conveyor 12 sampling WSTD White product. Koury wore a 3M 8511 N-95 dust mask.	0.53 mg/m ³	0.11 mg/m ³
27039727	Time on: 11:40 am Time off: 11:55 am Total Min: 15 min	Personal Sample: Koury Sek working in the "riffle room" mixing composite samples of the WSTD White product. Koury wore a 3M 8511 N-95 dust mask.	<3.3 mg/m ³	ND
27039737	Time on: 1:10 pm Time off: 4:30 pm Total Min: 200 min	Personal Sample: Eugene Evett working on the sampling station within the storage building on Conveyor 16 sampling the G515 product. Eugene wore a 3M Air Stream Breathe Easy BE-10 Powered Air Purifying Respirator.	11 mg/m ³	4.58 mg/m ³
27059549	Time on: 4:51 pm Time off: 5:00 pm Total Min: 9 min	Personal Sample: Dale Morgan working in the "Riffle Room" mixing composite samples of the G515 product. No respiratory protection.	<5.6 mg/m ³	ND
27059551	Time on: NA Time off: NA Total Min: NA	Analytical Blank	Acceptable	Acceptable

Notes:

OR-OSHA/ACGIH Total Dust PELs/TLV = 10 mg/m³ as an 8-hour TWA.

OR-OSHA	Oregon Occupational Safety and Health Administration
ACGIH	American Conference of Governmental Industrial Hygienist
PELs	Permissible Exposure Limits
TLV	Threshold Limit Values
mg/m ³	milligrams per cubic meter
TWA	Time Weighted Average
ND	None Detected
NA	Not Applicable

TABLE 2
Total Dust Results Conveyor 12





APPENDIX A

Photograph Log



Photo 1
Conveyor 16
Storage Building

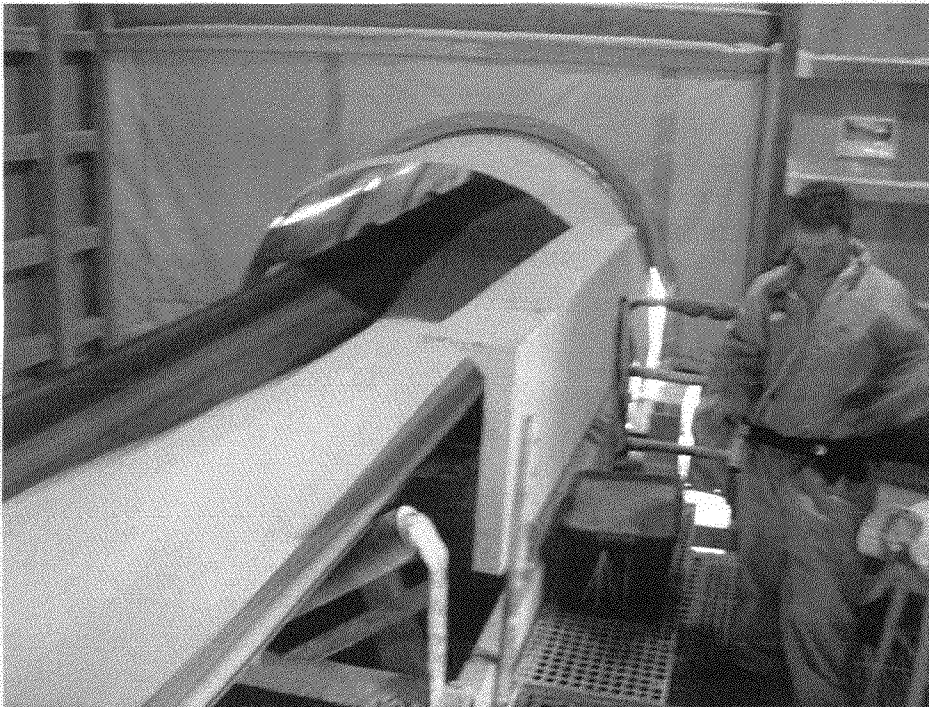


Photo 2
Conveyor 16
Sampling Station



7376 SW Durham Road
Portland, Oregon 97224

W.O. 8-61M-118260
PROCESSED RR
DATE June 2008
PAGE 1

SGS NA Minerals
Port of Portland - Terminal 5
Portland, Oregon

PHOTOGRAPH LOG



Photo 3
Conveyor 16
Eugene Evett



7376 SW Durham Road
Portland, Oregon 97224

W.O. 8-61M-118260
PROCESSED RR
DATE June 2008
PAGE 2

SGS NA Minerals
Port of Portland - Terminal 5
Portland, Oregon

PHOTOGRAPH LOG



APPENDIX B

Laboratory Analysis Report



Bureau Veritas

Health, Safety & Environmental Services

Laboratory Analysis Report

Industrial Hygiene Laboratory
95 Oakwood Road
Lake Zurich, IL 60047
Phone (847) 726-3320
Fax (847) 726-3323
Toll Free (888) 576-7522

TO: ROB ROLOSON
AMEC EARTH AND ENVIRONMENTAL
7376 SW DURHAM ROAD
PORTLAND, OR 97224
USA

REPORT DATE MAY 21, 2008
SAMPLES REC'D MAY 19, 2008
REQUEST NUMBER 519155
PAGE NUMBER 1 OF 4

SAMPLE	AIR VOLUME / ANALYSIS REQUESTED	MEDIA TYPE / RESULTS	ANALYZED DATE
27039736	206 Liters TOTAL DUST	37mm 0.8 Micron Matched Mixed Cellulose Ester Filter Micrograms 110 Milligrams/Cubic Meter 0.53	MAY 21, 2008
27039727	30 Liters TOTAL DUST	37mm 0.8 Micron Matched Mixed Cellulose Ester Filter Micrograms < 100 Milligrams/Cubic Meter < 3.3	MAY 21, 2008
27039737	400 Liters TOTAL DUST	37mm 0.8 Micron Matched Mixed Cellulose Ester Filter Micrograms 4380 Milligrams/Cubic Meter 11	MAY 21, 2008
27059549	18 Liters TOTAL DUST	37mm 0.8 Micron Matched Mixed Cellulose Ester Filter Micrograms < 100 Milligrams/Cubic Meter < 5.6	MAY 21, 2008

COMMENTS:

IF PRESENT, DE MEANS DESORPTION EFFICIENCY

Respectfully submitted,

William M. Walsh, CIH, ROH
Vice President, Laboratory Services

*** ELECTRONIC COPY ***



Bureau Veritas

Health, Safety & Environmental Services

Laboratory Analysis Report

Industrial Hygiene Laboratory
95 Oakwood Road
Lake Zurich, IL 60047
Phone (847) 726-3320
Fax (847) 726-3323
Toll Free (888) 576-7522

TO: ROB ROLOSON
AMEC EARTH AND ENVIRONMENTAL
7376 SW DURHAM ROAD
PORTLAND, OR 97224
USA

REPORT DATE MAY 21, 2008
SAMPLES REC'D MAY 19, 2008
REQUEST NUMBER 519155
PAGE NUMBER 2 OF 4

SAMPLE	AIR VOLUME / ANALYSIS REQUESTED	MEDIA TYPE / RESULTS	ANALYZED DATE
27059551	COMMENT (BLANK)	37mm 0.8 Micron Matched Mixed Cellulose Ester Filter ACCEPTABLE	MAY 21, 2008

COMMENTS:

IF PRESENT, DE MEANS DESORPTION EFFICIENCY

Respectfully submitted,

William M. Walsh, CIH, ROH
Vice President, Laboratory Services

* * * ELECTRONIC COPY * * *



Bureau Veritas

Health, Safety & Environmental Services

Industrial Hygiene Laboratory

95 Oakwood Road
Lake Zurich, IL 60047
Phone (847) 726-3320
Fax (847) 726-3323
Toll Free (888) 576-7522

TO: ROB ROLOSON
AMEC EARTH AND ENVIRONMENTAL
7376 SW DURHAM ROAD
PORTLAND, OR 97224
USA

REPORT DATE MAY_21,_2008
SAMPLES REC'D MAY_19,_2008
REQUEST NUMBER 519155
PAGE NUMBER 3 OF 4

REPORTING LIMIT	ANALYSIS REQUESTED	METHODOLOGY	CAS #
100 Micrograms	TOTAL DUST MMW	MODIFIED NIOSH 0500 GRAVIMETRIC ANALYSIS	

COMMENTS:

- * CONCENTRATION CALCULATED USING AIR VOLUMES SUPPLIED BY CLIENT
- * UNLESS OTHERWISE NOTED, SAMPLES RECEIVED IN GOOD CONDITION
- * MODIFICATIONS MAY BE MADE TO ABOVE METHODS TO OPTIMIZE RESULTS (AVAILABLE UPON REQUEST)
- * RESULTS ARE STRICTLY LIMITED TO SAMPLES ANALYZED

Respectfully submitted,

William M. Walsh, CIH, ROH
Vice President, Laboratory Services

*** ELECTRONIC COPY ***



Bureau Veritas

Health, Safety & Environmental Services

Industrial Hygiene Laboratory

95 Oakwood Road
Lake Zurich, IL 60047
Phone (847) 726-3320
Fax (847) 726-3323
Toll Free (888) 576-7522

TO: ROB ROLOSON
AMEC EARTH AND ENVIRONMENTAL
7376 SW DURHAM ROAD
PORTLAND, OR 97224
USA

REPORT DATE MAY 21, 2008
SAMPLES REC'D MAY 19, 2008
REQUEST NUMBER 519155
PAGE NUMBER 4 OF 4

REQUEST LAB COMMENTS:

UNLESS OTHERWISE NOTED, ALL QC CRITERIA WERE MET.

Respectfully submitted,

William M. Walsh, CIH, ROH
Vice President, Laboratory Services

*** ELECTRONIC COPY ***

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of April 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	mH	Cloudy	GSIS	/			/	/			/	/		/		
17	mH	Clear	FIT1	/			/	/			/	/		/		
18	km	Clear	7Hm	/			/	/			/	/		/		
19	mH	Cloudy	7Hm	/			/	/			/	/		/		
20	km	Clear	N/A	/			/	/			/	/		/		
21	km	Clear	N/A	/			/	/			/	/		/		
22	mH	Cloudy	N/A	/			/	/			/	/		/		
23	mH	Clear	2IS	/			/	/			/	/		/		
24	mH	showing	7Hm	/			/	/			/	/		/		
25	km	showing	10STD	/			/	/			/	/		/		
26	km	Cloudy	7Hm	/			/	/			/	/		/		
27	km	Cloudy	WSTD	/			/	/			/	/		/		
28	km	Cloudy	Q1I1	/			/	/			/	/		/		
29	mH	Cloudy	2IS	/			/	/			/	/		/		
30	mH	Cloudy	7Hm	/			/	/			/	/		/		
31																

MANAGER SIGNATURE:

Rich Wells DATE: 5/2/11

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of April 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Cloudy	RESS	/			/	/		/	/		/			
2	MH	Showers	N/A	/			/	/		/	/		/			
3	MH	Cloudy	FLIS	/			/	/		/	/		/			
4	KM	Showers	GSIS	/			/	/		/	/		/			
5	KM	Cloudy	FLIS	/			/	/		/	/		/			
6	KM	Cloudy	7GRN	/			/	/		/	/		/			
7	KM	Cloudy	7GRN	/			/	/		/	/		/			
8	MH	Clear	7GRN	/			/	/		/	/		/			
9	MH	Cloudy	7GRN	/			/	/		/	/		/			
10	MH	Showers	7GRN	/			/	/		/	/		/			
11	KM	Cloudy	7GRN	/			/	/		/	/		/			
12	KM	Cloudy	7GRN	/			/	/		/	/		/			
13	KM	Rainy	FLIS	/			/	/		/	/		/			
14	KM	Rain	FLIS	/			/	/		/	/		/			
15	MH	Rain	FLIS	/		/		/		/	/		/			

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, March 10, 2011

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

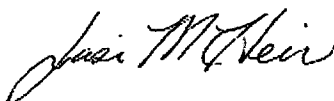
RE: Storm Water / Feb 2011

Enclosed are the results of analyses for work order A11B365, which was received by the laboratory on 2/28/2011 at 2:12:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: jhein@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: Feb 2011
Project Manager: Katrina Greene

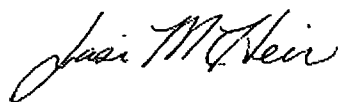
Reported:
03/10/11 16:09

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Feb Stormwater	A11B365-01	Water	02/28/11 13:15	02/28/11 14:12

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: Feb 2011
Project Manager: Katrina Greene

Reported:

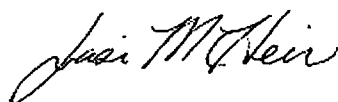
03/10/11 16:09

ANALYTICAL REPORT FOR SAMPLES

FIELD DATA (Provided by Client)

Lab Number	Sample Name	Field pH	pH Temp(C)
A11B365-01	Feb Stormwater	6.54	8.0

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported:

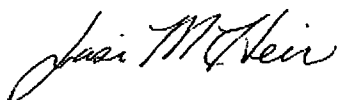
03/10/11 16:09

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Feb Stormwater (A11B365-01)			Matrix: Water		Batch: 1103010			
Copper	ND	---	0.00400	mg/L	1	03/02/11 14:32	EPA 200.8	
Lead	ND	---	0.00100	"	"	"	"	
Zinc	0.0221	---	0.00400	"	"	"	"	

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Josie M Hein For Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported:

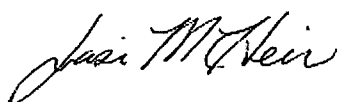
03/10/11 16:09

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Feb Stormwater (A11B365-01)			Matrix: Water		Batch: 1103053			
HEM (Oil and Grease)	ND	---	4.67	mg/L	1	03/04/11 12:22	EPA 1664	O-01
pH	7.39	---		pH Units	"	03/01/11 10:28	EPA 150.1	
pH Temperature (deg C)	20.3	---		"	"	"	"	
Total Suspended Solids	8.00	---	5.00	mg/L	"	03/01/11 16:40	SM 2540 D	

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported:

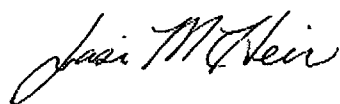
03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103010 - EPA 3015A						Water						
Blank (1103010-BLK1)						Prepared: 03/02/11 09:02		Analyzed: 03/02/11 13:11				
EPA 200.8												
Copper	ND	---	0.00400	mg/L	1	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (1103010-BS1)						Prepared: 03/02/11 09:02		Analyzed: 03/02/11 13:14				
EPA 200.8												
Copper	0.0557	---	0.00400	mg/L	1	0.0556	---	100	85-115%	---	---	
Lead	0.0558	---	0.00100	"	"	"	---	101	"	---	---	
Zinc	0.0565	---	0.00400	"	"	"	---	102	"	---	---	

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Josie M Hein For Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

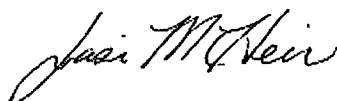
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203Project: Storm Water
Project Number: Feb 2011
Project Manager: Katrina GreeneReported:
03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103006 - Method Prep: Aq						Water						
Reference (1103006-SRM1)					Prepared: 03/01/11 09:44		Analyzed: 03/01/11 10:16					
EPA 150.1												
pH	7.94	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1103006-SRM2)					Prepared: 03/01/11 09:44		Analyzed: 03/01/11 10:39					
EPA 150.1												
pH	2.08	---		pH Units	1	2.00		104	95-105%	---	---	
Reference (1103006-SRM3)					Prepared: 03/01/11 15:00		Analyzed: 03/01/11 15:49					
EPA 150.1												
pH	5.98	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1103006-SRM4)					Prepared: 03/01/11 15:00		Analyzed: 03/01/11 16:04					
EPA 150.1												
pH	7.94	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1103006-SRM5)					Prepared: 03/01/11 15:00		Analyzed: 03/01/11 16:29					
EPA 150.1												
pH	5.99	---		pH Units	1	6.00		100	98.4-101.7%	---	---	

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Josie M Hein For Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported:

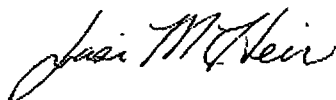
03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103007 - Total Suspended Solids						Water						
Blank (1103007-BLK1)						Prepared: 03/01/11 10:30 Analyzed: 03/01/11 14:15						
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Reference (1103007-SRM1)						Prepared: 03/01/11 10:30 Analyzed: 03/01/11 16:40						
SM 2540 D												
Total Suspended Solids	97.4	---		mg/L	1	96.6		101	90-110%	---	---	

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported:

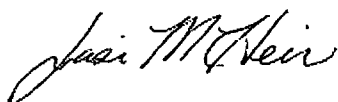
03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103053 - EPA 1664						Water						
Blank (1103053-BLK1)					Prepared: 03/03/11 08:27 Analyzed: 03/04/11 12:22							
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (1103053-BS1)					Prepared: 03/03/11 08:27 Analyzed: 03/04/11 12:22							
EPA 1664												
HEM (Oil and Grease)	37.4	---		mg/L	1	40.0	---	94	78-114%	---	---	

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

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Apex Labs

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503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: Feb 2011

Project Manager: Katrina Greenc

Reported:

03/10/11 16:09

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1103010							
A11B365-01	Water	EPA 200.8	02/28/11 13:15	03/02/11 09:02	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1103053							
A11B365-01	Water	EPA 1664	02/28/11 13:15	03/03/11 08:27	1N/A/1N/A	1N/A/1mL	NA

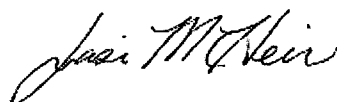
Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1103006							
A11B365-01	Water	EPA 150.1	02/28/11 13:15	03/01/11 09:44	20mL/20mL	20mL/20mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1103007							
A11B365-01	Water	SM 2540 D	02/28/11 13:15	03/01/11 10:30	1N/A/1N/A	1N/A/1mL	NA

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: Feb 2011
Project Manager: Katrina Greene

Reported:
03/10/11 16:09

Notes and Definitions

Qualifiers:

O-01 Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

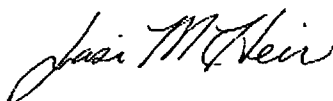
For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

--- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

*** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



Josie M Hein For Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Project: **Storm Water**
Project Number: Feb 2011
Project Manager: Katrina Greene

Reported:
03/10/11 16:09

[illegible]

Jack McKeir

Josie M Hein For Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Monday, December 20, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: Storm Water / December 2010

Enclosed are the results of analyses for work order A10L115, which was received by the laboratory on 12/8/2010 at 1:13:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: December 2010
Project Manager: Katrina Greene

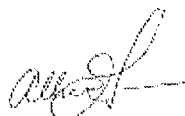
Reported:
12/20/10 14:19

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Dec. Stormwater	A10L115-01	Water	12/08/10 09:58	12/08/10 13:13

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

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Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: December 2010

Project Manager: Katrina Greene

Reported:


12/20/10 14:19

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Dec. Stormwater (A10L115-01)			Matrix: Water	Batch: 1012158				
Copper	ND	---	0.0200	mg/L	I	12/14/10 17:22	EPA 200.7	
Lead	0.0297	---	0.0100	"	"	"	"	
Zinc	0.110	---	0.0100	"	"	"	"	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Page 3 of 10

KMB00009958

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: December 2010
Project Manager: Katrina Greene

Reported:
12/20/10 14:19

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Dec. Stormwater (A10L115-01)			Matrix: Water		Batch: 1012112			
pH	7.33	---		pH Units	1	12/08/10 13:42	EPA 150.1	
pH Temperature (deg C)	16.9	---		"	"	"	"	
Total Suspended Solids	10.0	---	5.00	mg/L	"	12/09/10 14:00	SM 2540 D	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Page 4 of 10

KMB00009959

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: December 2010
Project Manager: Katrina Greene

Reported:
12/20/10 14:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1012158 - EPA 3015A						Water						
Blank (1012158-BLK1)						Prepared: 12/10/10 12:01		Analyzed: 12/14/10 15:47				
EPA 200.7												
Copper	ND	---	0.0200	mg/L	1	---	---	---	---	---	---	
Lead	ND	---	0.0100	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.0100	"	"	---	---	---	---	---	---	
LCS (1012158-BS1)						Prepared: 12/10/10 12:01		Analyzed: 12/14/10 15:50				
EPA 200.7												
Copper	0.509	---	0.0200	mg/L	1	0.556	---	92	85-115%	---	---	
Lead	0.492	---	0.0100	"	"	"	---	88	"	---	---	
Zinc	0.535	---	0.0100	"	"	"	---	96	"	---	---	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: December 2010
Project Manager: Katrina Greene


Reported:
12/20/10 14:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1012112 - Method Prep: Aq						Water						
Reference (1012112-SRM1)						Prepared: 12/08/10 11:13 Analyzed: 12/08/10 11:30						
EPA 150.1												
pH	6.04	---		pH Units	1	6.00		101	98.4-101.7%	---	---	
Reference (1012112-SRM2)						Prepared: 12/08/10 11:13 Analyzed: 12/08/10 11:54						
EPA 150.1												
pH	7.97	---		pH Units	1	8.00		100	98.74-101.26%	---	---	
Reference (1012112-SRM3)						Prepared: 12/08/10 11:13 Analyzed: 12/08/10 12:02						
EPA 150.1												
pH	6.05	---		pH Units	1	6.00		101	98.4-101.7%	---	---	
Reference (1012112-SRM4)						Prepared: 12/08/10 11:13 Analyzed: 12/08/10 13:17						
EPA 150.1												
pH	7.94	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1012112-SRM5)						Prepared: 12/08/10 11:13 Analyzed: 12/08/10 13:31						
EPA 150.1												
pH	6.01	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1012112-SRM6)						Prepared: 12/08/10 11:13 Analyzed: 12/08/10 13:43						
EPA 150.1												
pH	7.94	---		pH Units	1	8.00		99	98.74-101.26%	---	---	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: December 2010

Project Manager: Katrina Greene

Reported:

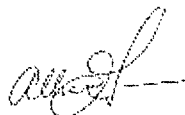
12/20/10 14:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1012132 - Total Suspended Solids						Water						
Blank (1012132-BLK1)					Prepared: 12/09/10 10:15 Analyzcd: 12/09/10 12:30							
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	B-02
Reference (1012132-SRM1)					Prepared: 12/09/10 10:15 Analyzcd: 12/09/10 14:00							
SM 2540 D												
Total Suspended Solids	92.0	---		mg/L	1	96.6		95	90-110%	---	---	

Apex Laboratories



Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: December 2010

Project Manager: Katrina Greene

Reported:

12/20/10 14:19

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.7 (ICP-AES)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1012158							
A10L115-01	Water	EPA 200.7	12/08/10 09:58	12/10/10 12:01	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1012112							
A10L115-01	Water	EPA 150.1	12/08/10 09:58	12/08/10 11:13	20mL/20mL	20mL/20mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1012132							
A10L115-01	Water	SM 2540 D	12/08/10 09:58	12/09/10 10:15	1N/A/1N/A	1N/A/1mL	NA

Apex Laboratories



Allison Greiner, Project Manager

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: December 2010
Project Manager: Katrina Greene

Reported:
12/20/10 14:19

Notes and Definitions

Qualifiers:

B-02 Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)

Notes and Conventions:

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD Relative Percent Difference
MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories



Allison Greiner, Project Manager

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: December 2010
Project Manager: Katrina Greene

Reported:
12/20/10 14:19

Page 1 of 1

Lab # 10115

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Tel: 503-718-2323 Fax: 503-718-0333

Client Name		Project Name		Date		Time		Project #		Project #	
Address		Project Name		Date		Time		Project #		Project #	
Kinder Morgan		Storm Water		12/20/10		14:19		10115		10115	
Sampled by: James S. Johnson		Project Name		Date		Time		Project #		Project #	
Site Location: W-5		Project Name		Date		Time		Project #		Project #	
Other: _____		Project Name		Date		Time		Project #		Project #	
SAMPLE ID: DC-Stormwater		Project Name		Date		Time		Project #		Project #	
ANALYSIS REQUEST		Project Name		Date		Time		Project #		Project #	
1200-2		Project Name		Date		Time		Project #		Project #	
1200-3		Project Name		Date		Time		Project #		Project #	
1200-4		Project Name		Date		Time		Project #		Project #	
1200-5		Project Name		Date		Time		Project #		Project #	
1200-6		Project Name		Date		Time		Project #		Project #	
1200-7		Project Name		Date		Time		Project #		Project #	
1200-8		Project Name		Date		Time		Project #		Project #	
1200-9		Project Name		Date		Time		Project #		Project #	
1200-10		Project Name		Date		Time		Project #		Project #	
1200-11		Project Name		Date		Time		Project #		Project #	
1200-12		Project Name		Date		Time		Project #		Project #	
1200-13		Project Name		Date		Time		Project #		Project #	
1200-14		Project Name		Date		Time		Project #		Project #	
1200-15		Project Name		Date		Time		Project #		Project #	
1200-16		Project Name		Date		Time		Project #		Project #	
1200-17		Project Name		Date		Time		Project #		Project #	
1200-18		Project Name		Date		Time		Project #		Project #	
1200-19		Project Name		Date		Time		Project #		Project #	
1200-20		Project Name		Date		Time		Project #		Project #	
1200-21		Project Name		Date		Time		Project #		Project #	
1200-22		Project Name		Date		Time		Project #		Project #	
1200-23		Project Name		Date		Time		Project #		Project #	
1200-24		Project Name		Date		Time		Project #		Project #	
1200-25		Project Name		Date		Time		Project #		Project #	
1200-26		Project Name		Date		Time		Project #		Project #	
1200-27		Project Name		Date		Time		Project #		Project #	
1200-28		Project Name		Date		Time		Project #		Project #	
1200-29		Project Name		Date		Time		Project #		Project #	
1200-30		Project Name		Date		Time		Project #		Project #	
1200-31		Project Name		Date		Time		Project #		Project #	
1200-32		Project Name		Date		Time		Project #		Project #	
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1200-34		Project Name		Date		Time		Project #		Project #	
1200-35		Project Name		Date		Time		Project #		Project #	
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1200-57		Project Name		Date		Time		Project #		Project #	
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1200-59		Project Name		Date		Time		Project #		Project #	
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1200-66		Project Name		Date		Time		Project #		Project #	
1200-67		Project Name		Date		Time		Project #		Project #	
1200-68		Project Name		Date		Time		Project #		Project #	
1200-69		Project Name		Date		Time		Project #		Project #	
1200-70		Project Name		Date		Time		Project #		Project #	
1200-71		Project Name		Date		Time		Project #		Project #	
1200-72		Project Name		Date		Time		Project #		Project #	
1200-73		Project Name		Date		Time		Project #		Project #	
1200-74		Project Name		Date		Time		Project #		Project #	
1200-75		Project Name		Date		Time		Project #		Project #	
1200-76		Project Name		Date		Time		Project #		Project #	
1200-77		Project Name		Date		Time		Project #		Project #	
1200-78		Project Name		Date		Time		Project #		Project #	
1200-79		Project Name		Date		Time		Project #		Project #	
1200-80		Project Name		Date		Time		Project #		Project #	
1200-81		Project Name		Date		Time		Project #		Project #	
1200-82		Project Name		Date		Time		Project #		Project #	
1200-83		Project Name		Date		Time		Project #		Project #	
1200-84		Project Name		Date		Time		Project #		Project #	
1200-85		Project Name		Date		Time		Project #		Project #	
1200-86		Project Name		Date		Time		Project #		Project #	
1200-87		Project Name		Date		Time		Project #		Project #	
1200-88		Project Name		Date		Time		Project #		Project #	
1200-89		Project Name		Date		Time		Project #		Project #	
1200-90		Project Name		Date		Time		Project #		Project #	
1200-91		Project Name		Date		Time		Project #		Project #	
1200-92		Project Name		Date		Time		Project #		Project #	
1200-93		Project Name		Date		Time		Project #		Project #	
1200-94		Project Name		Date		Time		Project #		Project #	
1200-95		Project Name		Date		Time		Project #		Project #	
1200-96		Project Name		Date		Time		Project #		Project #	
1200-97		Project Name		Date		Time		Project #		Project #	
1200-98		Project Name		Date		Time		Project #		Project #	
1200-99		Project Name		Date		Time		Project #		Project #	
1200-100		Project Name		Date		Time		Project #		Project #	

ANALYSIS REQUEST
Field pH = 7.28 12.17C → changed quickly and
difficult to stabilize → buffer assay - 12/08/10 @ 11:11
pH dated 12/20/10 by 12/08/10

RECEIVED BY: James S. Johnson
DATE: 12/20/10
TIME: 14:19

RECEIVED BY: James S. Johnson
DATE: 12/20/10
TIME: 14:19

RECEIVED BY: James S. Johnson
DATE: 12/20/10
TIME: 14:19

Apex Laboratories



Allison Greiner, Project Manager

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SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Certificate of Analysis

December 17, 2010

Workorder: H10120223

Allison Greiner
APEX Laboratories
12232 SW Garden Place
Portland, OR 97223

Project: A10L115
Project Number: A10L115
Site: Tigard, OR
PO Number:
NELAC Cert. No.: T104704205-09-3

This Report Contains A Total Of 10 Pages

Excluding Any Attachments



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Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Certificate of Analysis

December 17, 2010

Workorder: H10120223

Allison Greiner
APEX Laboratories
12232 SW Garden Place
Portland, OR 97223

Project: A10L115

Project Number: A10L115

Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg/kg-dry " or " ug/kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.



SPL Inc.
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Houston, TX 77054
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Fax: (713) 660-8975

Certificate of Analysis

December 17, 2010

Workorder: H10120223

Allison Greiner
APEX Laboratories
12232 SW Garden Place
Portland, OR 97223

Project: A10L115
Project Number: A10L115
Site: Tigard, OR
PO Number:
NELAC Cert. No.: T104704205-09-3

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Erica Cardenas, Senior Project Manager

Enclosures



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

SAMPLE SUMMARY

Workorder: H10120223 : A10L115

Project Number: A10L115

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10120223001	Dec. Stormwater	Water		12/8/2010 09:58	12/10/2010 09:30



SPL Inc.
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Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10120223 : A10L115

Project Number: A10L115

Lab ID: **H10120223001**
Sample ID: **Dec. Stormwater**

Date/Time Received: 12/10/2010 09:30 Matrix: Water
Date/Time Collected: 12/8/2010 09:58

WET CHEMISTRY

Analysis Desc: EPA 1664A

Analytical Batches:

Batch: 1616 EPA 1664A on 12/16/2010 09:30 by EAG

Parameters	Results	Qual	Report Limit	MDL	DF	RegLmt	Batch Information	
	mg/l						Prep	Analysis
Hexane Ext. Material (HEM)	ND		5.00	1.31	1			1616
Hexane Ext. Material (HEM-SGT)	ND		5.00	0.923	1			1616



QUALITY CONTROL DATA

Workorder: H10120223 : A10L115

Project Number: A10L115

QC Batch: OG/1616

Analysis Method: EPA 1664A

QC Batch Method: EPA 1664A

Associated Lab Samples:	H10120218001	H10120222001	H10120223001	H10120224001	H10120224002	H10120225001
	H10120291001	H10120292001	H10120293001	H10120294001	H10120296001	H10120296002
	H10120297001	H10120298001	H10120299001	H10120300001	H10120300002	H10120323003

METHOD BLANK: 86542

Analysis Date/Time Analyst: 12/16/2010 09:30 EAG

Parameter	Units	Blank Result	Qualifiers	Reporting Limit
Hexane Ext. Material (HEM)	mg/l	ND		5.00
Hexane Ext. Material (HEM-SGT)	mg/l	ND		5.00

LABORATORY CONTROL SAMPLE & LCSD: 86543 86544

LCS Analysis Date/Time Analyst: 12/16/2010 09:30 EAG

LCSD Analysis Date/Time 12/16/2010 09:30 EAG

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD
Hexane Ext. Material (HEM)	mg/l	40	39.6	39.2	99.0	98.0	78-114	1.0	18
Hexane Ext. Material (HEM-SGT)	mg/l	20	18.1	17.3	90.5	86.5	64-132	4.5	34

MATRIX SPIKE SAMPLE: 86545

Original: H10120218001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits
Hexane Ext. Material (HEM)	mg/l	ND	40	40.1	87.6	78-114
Hexane Ext. Material (HEM-SGT)	mg/l	ND	20	16.06	69.1	64-132

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



Legend

(S) - Indicates analyte is a surrogate

Qualifier	Qualifier Description
*	Recovery/RPD value outside QC limits
+	DCS Concentration
B	Analyte detected in the Method Blank
C	MTBE results were not confirmed by GCMS
D	Recovery out of range due to dilution
E	Results exceed calibration range
H	Exceeds holding time
I	Estimated value, between MDL and PQL (Florida)
J	Estimated value
JN	The analysis indicates the presence of an analyte
MI	Matrix Interference
N	Recovery outside of control limits
NC	Not Calculable (Sample Duplicate)
NC	Not Calculated - Sample concentration > 4 times the spike
ND	Not Detected at reporting Limits
P	Pesticide dual column results, greater than 25%
Q	Received past holding time
TNTC	Too numerous to count
U	Not Detected at reporting Limits



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10120223 : A10L115

Project Number: A10L115

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
H10120223001	Dec. Stormwater	EPA 1664A	OG/1616		



Sample Receipt Checklist

WorkOrder:	H10120223	Received By	LOG
Date and Time	12/10/2010 09:30	Carrier Name:	UPS
Temperature:	4.0°C	Chilled By:	Water Ice

1. Shipping container/cooler in good condition? YES
2. Custody seals intact on shipping container/cooler? Not Present
3. Custody seals intact on sample bottles? Not Present
4. Chain of custody present? YES
5. Chain of custody signed when relinquished and received? YES
6. Chain of custody agrees with sample labels? YES
7. Samples in proper container/bottle? YES
8. Samples containers intact? YES
9. Sufficient sample volume for indicated test? YES
10. All samples received within holding time? YES
11. Container/Temp Blank temperature in compliance? YES
12. Water - VOA vials have zero headspace? VOA Vials Not Present
13. Water - Preservation checked upon receipt(except VOA*)? Not Applicable

*VOA Preservation Checked After Sample Analysis

SPL Representative:
Client Name Contacted:
Client Instructions:

Contact Date & Time:

SUBCONTRACT ORDER

Apex Laboratories

A10L115



SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Allison Greiner

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: Dec. Stormwater

Water

Sampled: 12/08/10 09:58

(A10L115-01)

Analysis	Due	Expires	Comments
1664 HEM Subanalysis	12/22/10 17:00	01/05/11 09:58	
1664 SGT-HEM Subanalysis	12/22/10 17:00	01/05/11 09:58	
<i>Containers Supplied:</i>			
(A) 1 L Amber Glass - HCL			
(B) 1 L Amber Glass - HCL			

Standard turn



Released By JML Date 12/9/10 UPS Federal Express (Shipper)
Received By Chandra Date 12/10/10 09:30
Released By ups Date Received By Date

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Wednesday, December 1, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: Storm Water / November 2010

Enclosed are the results of analyses for work order A10K275, which was received by the laboratory on 11/17/2010 at 5:52:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: November 2010

Project Manager: Katrina Greene

Reported:

12/01/10 17:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stormwater	A10K275-01	Water	11/17/10 15:47	11/17/10 17:52

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Page 2 of 11

KMB00009977

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Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

ANALYTICAL REPORT FOR SAMPLES

FIELD DATA (Provided by Client)

Lab Number	Sample Name	Field pH	pH Temp(C)
A10K275-01	Stormwater	7.26	12.4

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater (A10K275-01)			Matrix: Water		Batch: 1011502			
Copper	ND	---	0.0100	mg/L	1	12/01/10 11:06	EPA 200.7	
Lead	ND	---	0.0100	"	"	"	"	
Zinc	ND	---	0.0100	"	"	"	"	

Apex Laboratories



Allison Greiner, Project Manager

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Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater (A10K275-01)			Matrix: Water		Batch: 1011357			
pH	7.04	---		pH Units	1	11/18/10 10:19	EPA 150.1	
pH Temperature (deg C)	14.0	---		"	"	"	"	
Total Suspended Solids	7.00	---	5.00	mg/L	"	11/18/10 16:26	SM 2540 D	

Apex Laboratories



Allison Greiner, Project Manager

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Page 5 of 11

KMB00009980

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1011502 - EPA 3015A						Water						
Blank (1011502-BLK1)				Prepared: 11/24/10 11:42 Analyzed: 12/01/10 10:48								
EPA 200.7												
Copper	ND	---	0.0100	mg/L	1	---	---	---	---	---	---	
Lead	ND	---	0.0100	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.0100	"	"	---	---	---	---	---	---	
LCS (1011502-BS1)				Prepared: 11/24/10 11:42 Analyzed: 12/01/10 10:51								
EPA 200.7												
Copper	0.0548	---	0.0100	mg/L	1	0.0556	---	99	85-115%	---	---	
Lead	0.0621	---	0.0100	"	"	"	---	112	"	---	---	
Zinc	0.0484	---	0.0100	"	"	"	---	87	"	---	---	

Apex Laboratories



Allison Greiner, Project Manager

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	Limits	RPD	RPD Limit	Notes
Batch 1011357 - Method Prep: Aq						Water						
Duplicate (1011357-DUP1)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 10:20						
QC Source Sample: Stormwater (A10K275-01)												
EPA 150.1												
pH	7.08	---		pH Units	1	---	7.04	---	---	0.6	10%	
pH Temperature (deg C)	14.0	---		"	"	---	14.0	---	---	0	30%	
Reference (1011357-SRM1)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 10:15						
EPA 150.1												
pH	6.02	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1011357-SRM2)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 10:21						
EPA 150.1												
pH	7.91	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1011357-SRM3)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 11:04						
EPA 150.1												
pH	6.02	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1011357-SRM4)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 11:09						
EPA 150.1												
pH	7.92	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1011357-SRM5)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 17:04						
EPA 150.1												
pH	6.03	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1011357-SRM6)						Prepared: 11/18/10 09:49 Analyzed: 11/18/10 17:20						
EPA 150.1												
pH	7.92	---		pH Units	1	8.00		99	98.74-101.26%	---	---	

Apex Laboratories



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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: November 2010

Project Manager: Katrina Greene

Reported:

12/01/10 17:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1011360 - Total Suspended Solids							Water					
Blank (1011360-BLK1)					Prepared: 11/18/10 10:33		Analyzed: 11/18/10 14:26					
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Reference (1011360-SRM1)					Prepared: 11/18/10 10:33		Analyzed: 11/18/10 16:26					
SM 2540 D												
Total Suspended Solids	100	---		mg/L	1	96.6		104	90-110%	---	---	

Apex Laboratories



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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.7 (ICP-AES)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1011502							
A10K275-01	Water	EPA 200.7	11/17/10 15:47	11/24/10 11:42	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1011357							
A10K275-01	Water	EPA 150.1	11/17/10 15:47	11/18/10 09:49	20mL/20mL	20mL/20mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1011360							
A10K275-01	Water	SM 2540 D	11/17/10 15:47	11/18/10 10:33	1N/A/1N/A	1N/A/1mL	NA

Apex Laboratories



Allison Greiner, Project Manager

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: November 2010
Project Manager: Katrina Greene

Reported:
12/01/10 17:21

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch
QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank
Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories



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Apex Labs

12232 S.W. Garden Place
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503-718-2323 Phone
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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: November 2010
Project Manager: Katrina Greiner

Reported:
12/01/10 17:21

Lab # 1102776
cmt: L-01

CHAIN OF CUSTODY

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0333

Customer: <u>Kinder Morgan</u>		Project Name: _____		Project # _____	
Address: _____		Phone: _____		Email: _____	
Sampled by: <u>Kristen S. Johnson</u>		ANALYSIS REQUEST			
Site Location: <u>WA</u>	State: <u>WA</u>	<input type="checkbox"/> PCBs <input type="checkbox"/> PAHs <input type="checkbox"/> Metals <input type="checkbox"/> Pesticides <input type="checkbox"/> Volatiles <input type="checkbox"/> Other: _____			
Sample ID: <u>Nov. Stormwater</u>	Container: <u>4</u>	<input type="checkbox"/> 100-2 <input type="checkbox"/> 100-3 <input type="checkbox"/> 100-4 <input type="checkbox"/> 100-5 <input type="checkbox"/> 100-6 <input type="checkbox"/> 100-7 <input type="checkbox"/> 100-8 <input type="checkbox"/> 100-9 <input type="checkbox"/> 100-10 <input type="checkbox"/> 100-11 <input type="checkbox"/> 100-12 <input type="checkbox"/> 100-13 <input type="checkbox"/> 100-14 <input type="checkbox"/> 100-15 <input type="checkbox"/> 100-16 <input type="checkbox"/> 100-17 <input type="checkbox"/> 100-18 <input type="checkbox"/> 100-19 <input type="checkbox"/> 100-20 <input type="checkbox"/> 100-21 <input type="checkbox"/> 100-22 <input type="checkbox"/> 100-23 <input type="checkbox"/> 100-24 <input type="checkbox"/> 100-25 <input type="checkbox"/> 100-26 <input type="checkbox"/> 100-27 <input type="checkbox"/> 100-28 <input type="checkbox"/> 100-29 <input type="checkbox"/> 100-30 <input type="checkbox"/> 100-31 <input type="checkbox"/> 100-32 <input type="checkbox"/> 100-33 <input type="checkbox"/> 100-34 <input type="checkbox"/> 100-35 <input type="checkbox"/> 100-36 <input type="checkbox"/> 100-37 <input type="checkbox"/> 100-38 <input type="checkbox"/> 100-39 <input type="checkbox"/> 100-40 <input type="checkbox"/> 100-41 <input type="checkbox"/> 100-42 <input type="checkbox"/> 100-43 <input type="checkbox"/> 100-44 <input type="checkbox"/> 100-45 <input type="checkbox"/> 100-46 <input type="checkbox"/> 100-47 <input type="checkbox"/> 100-48 <input type="checkbox"/> 100-49 <input type="checkbox"/> 100-50 <input type="checkbox"/> 100-51 <input type="checkbox"/> 100-52 <input type="checkbox"/> 100-53 <input type="checkbox"/> 100-54 <input type="checkbox"/> 100-55 <input type="checkbox"/> 100-56 <input type="checkbox"/> 100-57 <input type="checkbox"/> 100-58 <input type="checkbox"/> 100-59 <input type="checkbox"/> 100-60 <input type="checkbox"/> 100-61 <input type="checkbox"/> 100-62 <input type="checkbox"/> 100-63 <input type="checkbox"/> 100-64 <input type="checkbox"/> 100-65 <input type="checkbox"/> 100-66 <input type="checkbox"/> 100-67 <input type="checkbox"/> 100-68 <input type="checkbox"/> 100-69 <input type="checkbox"/> 100-70 <input type="checkbox"/> 100-71 <input type="checkbox"/> 100-72 <input type="checkbox"/> 100-73 <input type="checkbox"/> 100-74 <input type="checkbox"/> 100-75 <input type="checkbox"/> 100-76 <input type="checkbox"/> 100-77 <input type="checkbox"/> 100-78 <input type="checkbox"/> 100-79 <input type="checkbox"/> 100-80 <input type="checkbox"/> 100-81 <input type="checkbox"/> 100-82 <input type="checkbox"/> 100-83 <input type="checkbox"/> 100-84 <input type="checkbox"/> 100-85 <input type="checkbox"/> 100-86 <input type="checkbox"/> 100-87 <input type="checkbox"/> 100-88 <input type="checkbox"/> 100-89 <input type="checkbox"/> 100-90 <input type="checkbox"/> 100-91 <input type="checkbox"/> 100-92 <input type="checkbox"/> 100-93 <input type="checkbox"/> 100-94 <input type="checkbox"/> 100-95 <input type="checkbox"/> 100-96 <input type="checkbox"/> 100-97 <input type="checkbox"/> 100-98 <input type="checkbox"/> 100-99 <input type="checkbox"/> 100-100			
Special Test Request: <u>NO</u>	Special Test Request: <u>NO</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			
Normal Test Request: <u>YES</u>	Normal Test Request: <u>NO</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			
TAT Requested (days): <u>4 DAY</u>	TAT Requested (days): <u>4 DAY</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			
RELINQUISHED BY: <u>James S. Johnson</u>	RELINQUISHED BY: <u>James S. Johnson</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			
Signature: <u>James S. Johnson</u>	Signature: <u>James S. Johnson</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			
Printed Name: <u>James S. Johnson</u>	Printed Name: <u>James S. Johnson</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			
Company: <u>APEX</u>	Company: <u>APEX</u>	SPECIAL INSTRUCTIONS: <u>pH batch 1011341</u> <u>pH conducted in field, pH = 7.26 Temp 12.4°C</u> <u>11/17/10 10:00</u>			

Apex Laboratories

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Allison Greiner, Project Manager



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Certificate of Analysis

November 30, 2010

Workorder: H10110538

Allison Greiner
APEX Laboratories
12232 SW Garden Place
Portland, OR 97223

Project: A10K275

Project Number:

Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

This Report Contains A Total Of 9 Pages

Excluding Any Attachments



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
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Certificate of Analysis

November 30, 2010

Workorder: H10110538

Allison Greiner
APEX Laboratories
12232 SW Garden Place
Portland, OR 97223

Project: A10K275

Project Number:

Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Alisha Rodriguez, Senior Project Manager

Enclosures



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

SAMPLE SUMMARY

Workorder: H10110538 : A10K275

Project Number:

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10110538001	NOV. STORMWATER	Water		11/17/2010 15:47	11/20/2010 09:08



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10110538 : A10K275

Project Number:

Lab ID: **H10110538001**
Sample ID: **NOV. STORMWATER**

Date/Time Received: 11/20/2010 09:08 Matrix: Water
Date/Time Collected: 11/17/2010 15:47

WET CHEMISTRY

Analysis Desc: EPA 1664A

Analytical Batches:

Batch: 1591 EPA 1664A on 11/23/2010 10:30 by EAG

Parameters	Results	Qual	Report Limit	MDL	DF	RegLmt	Batch Information	
	mg/l						Prep	Analysis
Hexane Ext. Material (HEM)	ND		5.00	1.31	1			1591
Hexane Ext. Material (HEM-SGT)	ND		5.00	0.923	1			1591



QUALITY CONTROL DATA

Workorder: H10110538 : A10K275

Project Number:

QC Batch: OG/1591

Analysis Method: EPA 1664A

QC Batch Method: EPA 1664A

Associated Lab Samples:	H10110360002	H10110361001	H10110377001	H10110407001	H10110407002	H10110410002
	H10110453001	H10110454001	H10110538001	H10110539001	H10110539002	H10110540001
	H10110541001	H10110541002	H10110542001	H10110543001	H10110543002	H10110569003

METHOD BLANK: 83322

Analysis Date/Time Analyst: 11/23/2010 10:30 EAG

Parameter	Units	Blank Result	Qualifiers	Reporting Limit
Hexane Ext. Material (HEM)	mg/l	ND		5.00
Hexane Ext. Material (HEM-SGT)	mg/l	ND		5.00

LABORATORY CONTROL SAMPLE & LCSD: 83323 83324

LCS Analysis Date/Time Analyst: 11/23/2010 10:30 EAG

LCSD Analysis Date/Time 11/23/2010 10:30 EAG

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD
Hexane Ext. Material (HEM)	mg/l	40	38.7	38.1	96.8	95.2	78-114	1.6	18
Hexane Ext. Material (HEM-SGT)	mg/l	20	15.8	16.3	79.0	81.5	64-132	3.1	34

MATRIX SPIKE SAMPLE: 83325

Original: H10110569003

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits
Hexane Ext. Material (HEM)	mg/l	ND	40	39.8	96.5	78-114
Hexane Ext. Material (HEM-SGT)	mg/l	ND	20	16.57	82.0	64-132

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.



Legend

(S) - Indicates analyte is a surrogate

Qualifier	Qualifier Description
*	Recovery/RPD value outside QC limits
+	DCS Concentration
B	Analyte detected in the Method Blank
C	MTBE results were not confirmed by GCMS
D	Recovery out of range due to dilution
E	Results exceed calibration range
H	Exceeds holding time
I	Estimated value, between MDL and PQL (Florida)
J	Estimated value
JN	The analysis indicates the presence of an analyte
MI	Matrix Interference
N	Recovery outside of control limits
NC	Not Calculable (Sample Duplicate)
NC	Not Calculated - Sample concentration > 4 times the spike
ND	Not Detected at reporting Limits
P	Pesticide dual column results, greater than 25%
Q	Received past holding time
TNTC	Too numerous to count
U	Not Detected at reporting Limits



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10110538 : A10K275

Project Number:

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
H10110538001	NOV. STORMWATER	EPA 1664A	OG/1591		



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

Sample Receipt Checklist

WorkOrder:	H10110538	Received By	LOG
Date and Time	11/20/2010 09:08	Carrier Name:	FEDEXS
Temperature:	5.0°C	Chilled By:	Water Ice

1. Shipping container/cooler in good condition? YES
2. Custody seals intact on shipping container/cooler? Not Present
3. Custody seals intact on sample bottles? Not Present
4. Chain of custody present? YES
5. Chain of custody signed when relinquished and received? YES
6. Chain of custody agrees with sample labels? YES
7. Samples in proper container/bottle? YES
8. Samples containers intact? YES
9. Sufficient sample volume for indicated test? YES
10. All samples received within holding time? YES
11. Container/Temp Blank temperature in compliance? YES
12. Water - VOA vials have zero headspace? VOA Vials Not Present
13. Water - Preservation checked upon receipt(except VOA*)? Not Applicable

*VOA Preservation Checked After Sample Analysis

SPL Representative:
Client Name Contacted:
Client Instructions:

Contact Date & Time:



SPL Inc.
8880 Interchange Drive
Houston, TX 77054
Phone: (713) 660-0901
Fax: (713) 660-8975

SUBCONTRACT ORDER

Apex Laboratories
A10K275



H10110538

SENDING LABORATORY:

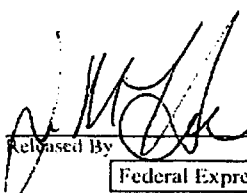
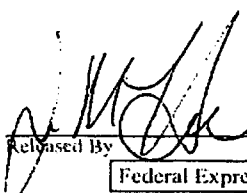
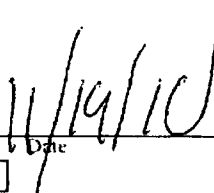
Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Allison Greiner

RECEIVING LABORATORY:

SPL, Inc Houston
8880 Interchange Dr.
Houston, TX 77054
Phone: (800) 969-6775
Fax: (713) 660-8975

Sample Name: Nov. Stormwater		Water	Sampled: 11/17/10 15:47	(A10K275-01)
Analysis	Duc	Expires	Comments	
1664 HEM Subanalysis	12/03/10 17:00	12/15/10 15:47		
1664 SGT-HEM Subanalysis	12/03/10 17:00	12/15/10 15:47		
Containers Supplied:				
(A) 1 L Amber Glass - HCL				
(B) 1 L Amber Glass - HCL				

Standard turn

Released By 	Date 11/19/10	Received By	Date
			
Released By	Date	Received By	Date

Federal Express (Shipper)

Page 1 of 1

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Thursday, April 28, 2011

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: Storm Water / April 2011

Enclosed are the results of analyses for work order A11D220, which was received by the laboratory on 4/15/2011 at 3:43:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stormwater Apr	A11D220-01	Water	04/15/11 13:49	04/15/11 15:43

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

ANALYTICAL REPORT FOR SAMPLES

FIELD DATA (Provided by Client)

Lab Number	Sample Name	Field pH	pH Temp(C)
A11D220-01	Stormwater Apr	8.52	11.5

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater Apr (A11D220-01)			Matrix: Water		Batch: 1104470			
Copper	ND	---	0.00400	mg/L	1	04/26/11 14:18	EPA 200.8	
Lead	ND	---	0.00100	"	"	"	"	
Zinc	0.0348	---	0.00400	"	"	"	"	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Storm Water**

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater Apr (A11D220-01)			Matrix: Water		Batch: 1104430			
HEM (Oil and Grease)	ND	---	4.72	mg/L	1	04/23/11 15:18	EPA 1664	O-01
pH	9.30	---		pH Units	"	04/15/11 16:48	EPA 150.1	
pH Temperature (deg C)	17.9	---		"	"	"	"	
Total Suspended Solids	5.00	---	5.00	mg/L	"	04/19/11 16:30	SM 2540 D	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: April 2011
Project Manager: Katrina Greene

Reported:
04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104470 - EPA 3015A						Water						
Blank (1104470-BLK1)						Prepared: 04/26/11 09:44		Analyzed: 04/26/11 11:48				
EPA 200.8												
Copper	ND	---	0.00400	mg/L	1	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (1104470-BS1)						Prepared: 04/26/11 09:44		Analyzed: 04/26/11 11:51				
EPA 200.8												
Copper	0.0559	---	0.00400	mg/L	1	0.0556	---	101	85-115%	---	---	
Lead	0.0566	---	0.00100	"	"	"	---	102	"	---	---	
Zinc	0.0551	---	0.00400	"	"	"	---	99	"	---	---	
LCS (1104470-BS2)						Prepared: 04/26/11 11:45		Analyzed: 04/26/11 13:17				
EPA 200.8												
Copper	0.0559	---	0.00400	mg/L	1	0.0556	---	101	85-115%	---	---	
Lead	0.0549	---	0.00100	"	"	"	---	99	"	---	---	
Zinc	0.0549	---	0.00400	"	"	"	---	99	"	---	---	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Storm Water
Project Number: April 2011
Project Manager: Katrina Greene

Reported:
04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104307 - Method Prep: Aq						Water						
Reference (1104307-SRM1)					Prepared: 04/15/11 15:05		Analyzed: 04/15/11 15:27					
EPA 150.1												
pH	6.03	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1104307-SRM2)					Prepared: 04/15/11 15:05		Analyzed: 04/15/11 15:45					
EPA 150.1												
pH	7.97	---		pH Units	1	8.00		100	98.74-101.26%	---	---	
Reference (1104307-SRM3)					Prepared: 04/15/11 15:05		Analyzed: 04/15/11 16:46					
EPA 150.1												
pH	6.05	---		pH Units	1	6.00		101	98.4-101.7%	---	---	
Reference (1104307-SRM4)					Prepared: 04/15/11 15:05		Analyzed: 04/15/11 16:50					
EPA 150.1												
pH	7.97	---		pH Units	1	8.00		100	98.74-101.26%	---	---	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104342 - Total Suspended Solids						Water						
Blank (1104342-BLK1)					Prepared: 04/19/11 13:00		Analyzed: 04/19/11 16:30					
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Reference (1104342-SRM1)					Prepared: 04/19/11 13:00		Analyzed: 04/19/11 16:30					
SM 2540 D												
Total Suspended Solids	92.0	---		mg/L	1	96.6		95	90-110%	---	---	

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 515550 N Lombard
Portland, OR 97203Project: **Storm Water**

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS**Conventional Chemistry Parameters**

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104430 - EPA 1664						Water						
Blank (1104430-BLK1)						Prepared: 04/23/11 09:17 Analyzed: 04/23/11 15:18						
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (1104430-BLK2)						Prepared: 04/23/11 09:17 Analyzed: 04/25/11 12:30						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (1104430-BS1)						Prepared: 04/23/11 09:17 Analyzed: 04/23/11 15:18						
EPA 1664												
HEM (Oil and Grease)	35.6	---		mg/L	1	40.0	---	89	78-114%	---	---	
LCS (1104430-BS2)						Prepared: 04/23/11 09:17 Analyzed: 04/25/11 12:30						
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	16.5	---		mg/L	1	20.0	---	82	64-132%	---	---	

Apex Laboratories



Allison Greiner, Project Manager

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: April 2011
Project Manager: Katrina Greene

Reported:
04/28/11 15:53

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1104470							
A11D220-01	Water	EPA 200.8	04/15/11 13:49	04/26/11 09:44	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1104430							
A11D220-01	Water	EPA 1664	04/15/11 13:49	04/23/11 09:17	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Aq

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1104307							
A11D220-01	Water	EPA 150.1	04/15/11 13:49	04/15/11 15:05	20mL/20mL	20mL/20mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1104342							
A11D220-01	Water	SM 2540 D	04/15/11 13:49	04/19/11 13:00	1N/A/1N/A	1N/A/1mL	NA

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Storm Water

Project Number: April 2011
Project Manager: Katrina Greene

Reported:

04/28/11 15:53

Notes and Definitions

Qualifiers:

O-01 Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

--- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

*** Used to indicate a possible discrepancy with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories



Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

**12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax**

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Storm Water**
Project Number: April 2011
Project Manager: Katrina Greene

Reported:
04/28/11 15:53

Lab # 41D22E

CHAIN OF CUSTODY

APEX LABS

[illegible]

Apex Laboratories

Alfred

Allison Greiner, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of March 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	Rain	76m	/			/	/			/	/		/		
17	km	Rain	78m	/			/	/			/	/		/		
18	MH	Showers	CLT1	/		/		/			/	/		/		
19	MH	Clearly	78m	/		/		/			/	/		/		
20	MH	Clearly	N/A	/			/	/			/	/		/		
21	km	Showers	CLT1	/			/	/			/	/		/		
22	km	Showers	78m	/			/	/			/	/		/		
23	km	clearly	78m	/			/	/			/	/		/		
24	km	clearly	78m	/			/	/			/	/		/		
25	MH	Fog	78m	/			/	/			/	/		/		
26	MH	Showers	78m	/		/		/			/	/		/		
27	MH	Showers	78m	/			/	/			/	/		/		
28	km	clearly	CLT1	/			/	/			/	/		/		
29	km	Showers	CLT5	/			/	/			/	/		/		
30	km	clearly	CLT1	/			/	/			/	/		/		
31	km	clearly	CLT4	/			/	/			/	/		/		

MANAGER SIGNATURE: *John Walker* DATE: 3/31/11

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of March 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	SNOW	7GRN	/			/	/			/	/		/		
2	KM	RAIN	7GRN	/			/	/			/	/		/		
3	KM	RAIN	PGRN	/			/	/			/	/		/		
4	MH	CLOUDY	7GRN	/			/	/			/	/		/		
5	MH	CLOUDY	7GRN	/			/	/			/	/		/		
6	MH	CLOUDY	WSTD	/			/	/			/	/		/		
7	KM	CLOUDY	7GRN	/			/	/			/	/		/		
8	KM	SHOWERS	7GRN	/			/	/			/	/		/		
9	KM	RAIN	7GRN	/			/	/			/	/		/		
10	KM	CLOUDY	7GRN	/			/	/			/	/		/		
11	MH	CLOUDY	7GRN	/		/		/			/	/		/		
12	MH	SHOWERS	PGRN	/			/	/			/	/		/		
13	MH	SHOWERS	N/A	/			/	/			/	/		/		
14	KM	RAIN	PGRN	/		/		/			/	/		/		
15	KM	SHOWERS	4275	/		/		/			/	/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of February 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	RAIN	RSTD	/			/	/			/	/		/		
17	KM	CLOUDY	WFSS	/			/	/			/	/		/		
18	MH	CLOUDY	G5IS	/			/	/			/	/		/		
19	MH	CLEAR	N/A	/			/	/			/	/		/		
20	MH	CLEAR	7GRN	/			/	/			/	/		/		
21	KM	SHOWERS	PGR	/			/	/			/	/		/		
22	KM	SHOWERS	7GR	/			/	/			/	/		/		
23	KM	RAIN	WSTD	/			/	/			/	/		/		
24	KM	SMOOD	G4I1	/			/	/			/	/		/		
25	MH	CLEAR	F2IS	/			/	/			/	/		/		
26	MH	CLEAR	PGM	/			/	/			/	/		/		
27	MH	CLOUDY	PGM	/			/	/			/	/		/		
28	KM	RAIN	PGM	/			/	/			/	/		/		
29																
30																
31																

MANAGER SIGNATURE: *[Signature]*

DATE: 3/2/11

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of February 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Clear	7Hm	/			/	/			/		/			
2	KM	Cloudy	7Hm	/			/	/			/		/			
3	KM	PCLOUDY	7Hm	/			/	/			/		/			
4	MH	Cloudy	N/A	/			/	/			/		/			
5	MH	Cloudy	7Hm	/			/	/			/		/			
6	MH	FOG	WSTD	/			/	/			/		/			
7	KM	PCLOUDY	F2IS	/			/	/			/		/			
8	KM	Cloudy	FII	/			/	/			/		/			
9	KM	Cloudy	N/A	/			/	/			/		/			
10	KM	FOG	F2IS	/			/	/			/		/			
11	MH	Cloudy	7GRW	/			/	/			/		/			
12	MH	Cloudy	N/A	/			/	/			/		/			
13	MH	FOG	7GRW	/			/	/			/		/			
14	KM	Cloudy	7GRW	/			/	/			/		/			
15	KM	RAIN	7GRW	/		/		/			/		/			

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of January 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Clearly	N/A	/			/	/			/	/		/		
2	MH	Clearly	7Hm	/			/	/			/	/		/		
3	BM	DClear	7Hm	/			/	/			/	/		/		
4	BM	Clear	41I1	/			/	/			/	/		/		
5	BM	Rain	WSTD	/			/	/			/	/		/		
6	BM	Rain	7Hm	/			/	/			/	/		/		
7	MH	Clearly	WSTD	/			/	/			/	/		/		
8	MH	Fog	7Hm	/			/	/			/	/		/		
9	MH	Showers	41I1	/			/	/			/	/		/		
10	BM	Rain	WSTD	/			/	/			/	/		/		
11	BM	Clear	WSTD	/			/	/			/	/		/		
12	BM	Rain	7Hm	/			/	/			/	/		/		
13	BM	Cloudy	7Hm	/			/	/			/	/		/		
14	MH	Showers	WSTD	/			/	/			/	/		/		
15	MH	Showers	N/A	/			/	/			/	/		/		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of January 2011

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	m H	Shower	7:30am	/		/		/		/		/		/		
17	km	Cloudy	7:30am	/		/		/		/		/		/		
18	km	Rain	7:30am	/		/		/		/		/		/		
19	km	Cloudy	7:25	/		/		/		/		/		/		
20	km	Cloudy	7:30am	/		/		/		/		/		/		
21	m H	Rain	7:30am	/		/		/		/		/		/		
22	m H	cloudy	7:30am	/		/		/		/		/		/		
23	m H	Fog	7:30am	/		/		/		/		/		/		
24	km	Fog	7:11	/		/		/		/		/		/		
25	km	Shower	7:25	/		/		/		/		/		/		
26	km	Fog	7:11	/		/		/		/		/		/		
27	km	Fog	8:10	/		/		/		/		/		/		
28	m H	Fog	7:30am	/		/		/		/		/		/		
29	m H	Cloudy	2:55	/		/		/		/		/		/		
30	m H	Fog	7:30am	/		/		/		/		/		/		
31	km	Cloudy	7:30am	/		/		/		/		/		/		

MANAGER SIGNATURE:

 DATE: 1/31/11

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of December 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	AM	Cloudy	RSTD	/			/	/			/	/		/		
17	MT	Clear	2 Gm	/			/	/			/	/		/		
18	MT	Shower	N/A	/			/	/			/	/		/		
19	MT	Cloudy	RFB	/			/	/			/	/		/		
20	AM	Cloudy	71TA	/			/	/			/	/		/		
21	AM	Cloudy	41TA	/		/		/			/	/		/		
22	AM	Cloudy	7 Gm	/			/	/			/	/		/		
23	AM	Cloudy	N/A	/			/	/			/	/		/		
24	MT	Cloudy	N/A	/			/	/			/	/		/		
25	MT	Cloudy	N/A	/			/	/			/	/		/		
26	MT	Shower	N/A	/			/	/			/	/		/		
27	AM	Shower	N/A	/			/	/			/	/		/		
28	AM	Rain	N/A	/		/		/			/	/		/		
29	AM	Rain	7 Gm	/			/	/			/	/		/		
30	AM	Cloudy	PGm	/			/	/			/	/		/		
31	MT	Clear	2 Gm	/			/	/			/	/		/		

MANAGER SIGNATURE: John W. R. DATE: 1/6/11

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of December 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	km	Rain	C2IS	/		/		/			/	/		/		
2	km	Cloudy	WESS	/			/	/			/	/		/		
3	km	Cloudy	RSTD	/			/	/			/	/		/		
4	km	Cloudy	F1I1	/			/	/			/	/		/		
5	cm	Cloudy	7Hm	/			/	/			/	/		/		
6	km	Rain	N/A	/			/	/			/	/		/		
7	km	Cloudy	72IS	/			/	/			/	/		/		
8	km	Rain	72IS	/			/	/			/	/		/		
9	km	Rain	72IS	/		/		/			/	/		/		
10	MH	Snowing	7Hm	/		/		/			/	/		/		
11	MH	Snowing	N/A	/		/		/			/	/		/		
12	MH	Cloudy	2Hm	/		/		/			/	/		/		
13	km	Cloudy	N/A	/		/		/			/	/		/		
14	km	Rain	7Hm	/		/		/			/	/		/		
15	km	Cloudy	7Hm	/			/	/			/	/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of November 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Cloudy	N/A	/			/	/			/	/		/		
2	KM	Fog	N/A	/		/		/			/	/		/		
3	KM	Clear	7Hm	/			/	/			/	/		/		
4	KM	Cloudy	7Hm	/			/	/			/	/		/		
5	MH	Cloudy	4Hm	/			/	/			/	/		/		
6	MH	Shower	B5IS	/			/	/			/	/		/		
7	MH	Shower	7Hm	/		/		/			/	/		/		
8	KM	Cloudy	42IS	/			/	/			/	/		/		
9	KM	Shower	N/A	/			/	/			/	/		/		
10	KM	Cloudy	N/A	/			/	/			/	/		/		
11	KM	Cloudy	B8TP	/			/	/			/	/		/		
12	MH	Fog	WESS	/			/	/			/	/		/		
13	MH	Shower	42IS	/			/	/			/	/		/		
14	MH	Cloudy	42IS	/			/	/			/	/		/		
15	KM	Cloudy	7Hm	/			/	/			/	/		/		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of November 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	DM	Rain	2Hm	/			/	/		/	/		/			
17	DM	Clear	7Hm	/			/	/		/	/		/			
18	DM	Rain	7Hm	/			/	/		/	/		/			
19	MH	Clear	GLI1	/		/		/		/	/		/			
20	MH	Rain	7Hm	/		/		/		/	/		/			
21	MH	Clear	7Hm	/			/	/		/	/		/			
22	DM	Clear	RSS	/			/	/		/	/		/			
23	DM	clearly	N/A	/		/		/		/	/		/			
24	DM	clearly	GSIS	/			/	/		/	/		/			
25	DM	clearly	N/A	/			/	/		/	/		/			
26	MH	Rain	GLI1	/			/	/		/	/		/			
27	DM	clearly	GLI1	/			/	/		/	/		/			
28	CM	clearly	GSIS	/			/	/		/	/		/			
29	DM	clearly	N/A	/			/	/		/	/		/			
30	DM	Rain	GSIS	/			/	/		/	/		/			
31																

MANAGER SIGNATURE:

Jack Will DATE: 11/30/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of October 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	mH	Clear	N/A	/			/	/			/	/			/	
17	mH	Clear	N/A	/			/	/			/	/			/	
18	km	pclear	N/A	/			/	/			/	/			/	
19	km	pclear	N/A	/			/	/			/	/			/	
20	km	Fog	N/A	/			/	/			/	/			/	
21	km	Fog	DSID	/			/	/			/	/			/	
22	mH	Cloudy	N/A	/			/	/			/	/			/	
23	mH	Showers	N/A	/			/	/			/	/			/	
24	mH	Rain	N/A	/			/	/			/	/			/	
25	km	Rain	N/A	/			/	/			/	/			/	
26	km	Cloudy	N/A	/			/	/			/	/			/	
27	km	Cloudy	N/A	/			/	/			/	/			/	
28	km	Rain	7:30m	/		/	/	/			/	/			/	
29	mH	Showers	7:30m	/		/	/	/			/	/			/	
30	mH	Showers	7:30m	/		/	/	/			/	/			/	
31	mH	Cloudy	7:30m	/		/	/	/			/	/			/	

MANAGER SIGNATURE:

[Signature]

DATE:

11/2/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of October 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Clear	7/8m	/			/	/			/	/		/		
2	MH	Cloudy	WESS	/			/	/			/	/		/		
3	MH	Cloudy	WESS	/			/	/			/	/		/		
4	BM	Cloudy	WESS	/			/	/			/	/		/		
5	BM	Cloudy	7/8m	/			/	/			/	/		/		
6	BM	Clear	N/A	/			/	/			/	/		/		
7	BM	Cloudy	RSTD	/			/	/			/	/		/		
8	MH	Cloudy	RSTD	/			/	/			/	/		/		
9	MH	Shower	RSTD	/			/	/			/	/		/		
10	MH	Rain	RSTD	/			/	/			/	/		/		
11	CM	Cloudy	LCSTD	/			/	/			/	/		/		
12	BM	Fog	WSTD	/			/	/			/	/		/		
13	BM	Fog	7/8m	/			/	/			/	/		/		
14	BM	Fog	N/A	/			/	/			/	/		/		
15	MH	Cloudy	N/A	/			/	/			/	/		/		

Routing: Please check box when reviewed
☐ 2. Terminal Manager
☐ 3. Assistant

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of September 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	Km	Rain	N/A	/			/	/		/	/	/		/		
17	MH	Cloudy	Colt 4	/			/	/		/	/	/		/		
18	MH	Cloudy	7th	/			/	/		/	/	/		/		
19	MH	Shower	7th	/			/	/		/	/	/		/		
20	Km	Rain	7th	/			/	/		/	/	/		/		
21	Km	Cloudy	PS TO	/			/	/		/	/	/		/		
22	Km	Cloudy	PFSS	/			/	/		/	/	/		/		
23	Km	Cloudy	225	/			/	/		/	/	/		/		
24	MH	Cloudy	N/A	/			/	/		/	/	/		/		
25	MH	Log	N/A	/			/	/		/	/	/		/		
26	MH	Shower	N/A	/			/	/		/	/	/		/		
27	MH	Cloudy	N/A	/			/	/		/	/	/		/		
28	Km	Cloudy	N/A	/			/	/		/	/	/		/		
29	Km	Cloudy	N/A	/			/	/		/	/	/		/		
30	Km	Cloudy	N/A	/			/	/		/	/	/		/		
31																

MANAGER SIGNATURE:

John Will DATE: 9/30/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH of September 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Cloudy	7 Grn	✓			✓	✓			✓	✓		✓		
2	KM	Clear	7 Grn	✓			✓	✓			✓	✓		✓		
3	MH	Clear	7 Grn	✓			✓	✓			✓	✓		✓		
4	MH	Clear	7 Grn	✓			✓	✓			✓	✓		✓		
5	MH	Cloudy	8 STS	✓			✓	✓			✓	✓		✓		
6	KM	Clear	N/A	✓			✓	✓			✓	✓		✓		
7	KM	Clear	7 Grn	✓			✓	✓			✓	✓		✓		
8	KM	Cloudy	4 STS	✓			✓	✓			✓	✓		✓		
9	KM	Cloudy	RSTD	✓			✓	✓			✓	✓		✓		
10	MH	Cloudy	RSTD	✓			✓	✓			✓	✓		✓		
11	MH	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
12	MH	Clear	N/A	✓			✓	✓			✓	✓		✓		
13	KM	Clear	RSTD	✓			✓	✓			✓	✓		✓		
14	KM	Clear	N/A	✓			✓	✓			✓	✓		✓		
15	KM	Clear	N/A	✓			✓	✓			✓	✓		✓		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF August 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	Km	clear	N/A	✓			✓	✓			✓	✓		✓		
17	Km	Clear	7Grn	✓			✓	✓			✓	✓		✓		
18	Km	Cloudy	7Grn	✓			✓	✓			✓	✓		✓		
19	Km	Cloudy	7Grain	✓			✓	✓			✓	✓		✓		
20	MH	Clear	7Grn	✓			✓	✓			✓	✓		✓		
21	MH	Pcloudy	G515	✓			✓	✓			✓	✓		✓		
22	MH	Cloudy	PSTD	✓			✓	✓			✓	✓		✓		
23	Km	P-Cloudy	N/A	✓			✓	✓			✓	✓		✓		
24	Km	Clear	PSTD	✓			✓	✓			✓	✓		✓		
25	Km	Clear	F215	✓			✓	✓			✓	✓		✓		
26	Km	Clear	PSTD	✓			✓	✓			✓	✓		✓		
27	MH	Cloudy	RFSS	✓			✓	✓			✓	✓		✓		
28	MH	Pcloudy	N/A	✓			✓	✓			✓	✓		✓		
29	MH	Pcloudy	N/A	✓			✓	✓			✓	✓		✓		
30	Km	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
31	Km	Cloudy	7Gr	✓			✓	✓			✓	✓		✓		

MANAGER SIGNATURE:

Jzelwiler

DATE:

9/1/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF August 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
2	KM	Cloudy	F2I5	✓			✓	✓			✓	✓		✓		
3	KM	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
4	KM	Fog	7GRN	✓			✓	✓			✓	✓		✓		
5	KM	Clear	7GRN	✓			✓	✓			✓	✓		✓		
6	MH	Cloudy	7GRN	✓			✓	✓			✓	✓		✓		
7	MH	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
8	MH	Cloudy	7GRN	✓			✓	✓			✓	✓		✓		
9	KM	Cloudy	2GRN	✓			✓	✓			✓	✓		✓		
10	KM	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
11	KM	Cloudy	RSTD	✓			✓	✓			✓	✓		✓		
12	KM	Pl Cloudy	RSTD	✓			✓	✓			✓	✓		✓		
13	MH	Clear	7GRN	✓			✓	✓			✓	✓		✓		
14	MH	Clear	7GRN	✓			✓	✓			✓	✓		✓		
15	MH	Clear	NA	✓			✓	✓			✓	✓		✓		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF ^{July}~~June~~ 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	MH	Clear	N/A	✓			✓	✓			✓	✓		✓		
17	MH	Partly	N/A	✓			✓	✓			✓	✓		✓		
18	MH	Clear	780m	✓			✓	✓			✓	✓		✓		
19	KM	Clear	780m	✓			✓	✓			✓	✓		✓		
20	KM	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
21	KM	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
22	KM	P.Cloudy	N/A	✓			✓	✓			✓	✓		✓		
23	MH	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
24	MH	Clear	F215	✓			✓	✓			✓	✓		✓		
25	MH	Clear	N/A	✓			✓	✓			✓	✓		✓		
26	KM	Clear	N/A	✓			✓	✓			✓	✓		✓		
27	KM	Clear	N/A	✓			✓	✓			✓	✓		✓		
28	KM	Cloudy	7 Gen	✓			✓	✓			✓	✓		✓		
29	KM	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
30	MH	Cloudy	N/A	✓			✓	✓			✓	✓		✓		
31	MH	Cloudy	N/A	✓			✓	✓			✓	✓		✓		

MANAGER SIGNATURE: _____ DATE: _____

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF July 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Cloudy	26PN	/			/	/		/	/	/		/		
2	MH	Showers	26PN	/			/	/		/	/	/		/		
3	MH	Partly Cloudy	56PN	/			/	/		/	/	/		/		
4	MH	Clear	76PN	/			/	/		/	/	/		/		
5	KM	Cloudy	N/A	/			/	/		/	/	/		/		
6	KM	Clear	N/A	/			/	/		/	/	/		/		
7	KM	Clear	N/A	/			/	/		/	/	/		/		
8	KM	Clear	76PN	/			/	/		/	/	/		/		
9	MH	Clear	76PN	/			/	/		/	/	/		/		
10	MH	Clear	76PN	/			/	/		/	/	/		/		
11	MH	Clear	76PN	/			/	/		/	/	/		/		
12	KM	Cloudy	76PN	/			/	/		/	/	/		/		
13	KM	Clear	76PN	/			/	/		/	/	/		/		
14	KM	Clear	N/A	/			/	/		/	/	/		/		
15	KM	Clear	N/A	/			/	/		/	/	/		/		

Routing: Please check box when reviewed
☐ 2. Terminal Manager
☐ 3. Assistant

Distribution:
 Original to File
 Copy to Stormwater Report File



Kinder Morgan Terminals

July 21, 2010

Mr. Timothy P. Dean
City of Portland - Environmental Services
Water Pollution Control Laboratory
Industrial Stormwater Program
6543 N. Burlington Avenue
Portland, OR 97203-5452

Re: Annual Stormwater Report for 2010

Ref: Permit #101377

Dear Mr. Dean:

Enclosed is Portland Bulk Terminal Five's annual Stormwater Report for the year ending June 30, 2010.

During the process of reviewing this annual report it was discovered that the sample taken on 12/16/09 had a benchmark exceedance in its Copper total. This Copper exceedance was not reported as required by the 1200-Z Stormwater discharge Permit. The corrective action taken due to the benchmark exceedance of the Zinc total during the same sample time also corrected the Copper total which was reaffirmed by the following three discharge samplings.

If there are questions, please do not hesitate to call me at the number listed below.


Sincerely yours,

KINDER MORGAN BULK TERMINALS

Jack Waller
Manager, Terminal 5

CC: Regional EHS Manager
File

Industrial Stormwater Discharge Monitoring Report - 1200-Z Permit

Permittee Legal Name:	Kinder Morgan	ODEQ File No./Facility ID:	70613	
Facility Common Name:	Portland Bulk Terminals	Reporting Period:	July 1, 2009 to June 30, 2010	
Facility Location:	15550 North Lombard, Portland, OR 97203	Laboratory Name:	Specialty Analytical/ Apex Labs	
County:	Multnomah	Laboratory ORELAP #:	OR01039	

Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility has more than 4 sampling points). You MUST also attach a copy of laboratory results sheet(s) and associated QA/QC information to this form

Name or Number of Sampling Point(s) (group data per sampling point)	Sample Date	pH **	Suspended Solids, Total **	Oil and Grease, Total **	Copper, Total	Lead, Total	Zinc, Total	E. coli *	
		S.U.	mg/L	mg/L	mg/L	mg/L	mg/L	counts/100 ml	
Outfall 001	12/16/2009	6.8	26	6.2	0.104	0.016	0.642		<p>* Only applies to landfills accepting septage/biosolids and sewage treatment plants.</p> <p>** Effluent limits for these parameters apply to some industries - see permit, Schedule A.7.</p> <p>Note 1: Submit this report to the appropriate DEQ regional or agent offices (see below) annually by July 31st. The report must contain the results of all stormwater monitoring conducted during the year. If you have a monitoring waiver for one or more of the pollutant(s), please report "M" in the column(s)-see permit-Schedule B.3.</p> <p>Note 2: Non-detects must be reported as "ND" along with the applicable method detection limit in parentheses - e.g. ND (0.001).</p> <p>Note 3: If a stormwater sampling result exceeds any of the benchmark values, the permit registrant must, within 30 calendar days of receiving the sampling results, investigate the cause of the benchmark exceedance(s), review the SWPCP and submit an Action Plan for department or agent approval.</p> <p>Note 4: For the 4th year of coverage under the permit that became effective on July 1, 2007, report the geometric mean value of the last 4 samples collected for each pollutant parameter, from each sampling point. The geometric mean value is automatically calculated if using the Excel version of the DMR form.</p>
Outfall 001	12/31/2009	6.7	39	ND	ND	ND	0.0863		
Outfall 001	2/5/2010	6.85	ND	ND	0.00518	0.001	0.0297		
Outfall 001	2/24/2010	6.92	ND	ND	0.00414	ND	0.0529		
Geometric Mean (Note 4)		6.817	31.843	6.200	0.013	0.004	0.097		
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Permit Benchmark		5.5 - 9.0	130	10	0.1	0.4	0.6	406	

Name/Title Principal Executive Officer or Authorized Delegate

(Please Print)	
Telephone: 503-285-4200	Email: wallerj@kindermorgan.com

I certify, under penalty of law, that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sign here: _____ Date _____

See reverse side for additional visual monitoring requirements

Monthly Visual Observations

Record Visual Observations for Oil and Grease Sheen and Floating Solids:

Oil and Grease Sheen - No visible sheen allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.

Floating Solids (associated with industrial activities) - No visible discharge allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.

Date

Observations (please note the sampling point(s) name or number)

July	No Discharge	
August	No Discharge	
September	No Discharge	
October	10/26/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
November	11/15/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
December	12/15/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
January	1/17/2010	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
February	2/13/2010	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
March	3/11/2010	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
April	4/2/2010	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
May	5/17/2010	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.
June	6/6/2010	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.

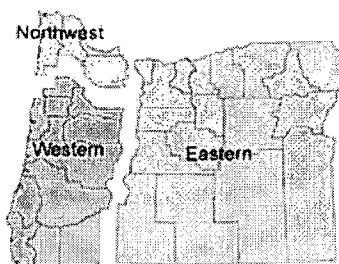
For facilities located within the following local jurisdictions, please submit one (1) copy of this report and laboratory results sheet(s) and QA/QC documentation to the local jurisdiction annually by July 31st:

Clean Water Services
Industrial Stormwater
2550 SW Hillsboro Hwy.
Hillsboro, OR 97123

City of Portland
Industrial Stormwater
Section
Water Pollution Control Lab
6543 N Burlington Ave.
Portland, OR 97203-5452

City of Eugene
Industrial Source Control
410 River Ave.
Eugene, OR 97404

For all other locations, please submit one (1) copy of this report and laboratory results sheet(s) and the QA/QC documentation to the appropriate DEQ regional office annually by July 31st:



DEQ Northwest Region Office
2020 SW 4th Ave. Suite 400
Portland, OR 97201
Phone: (503) 229-5263
Hours: 8 am - 5 pm

DEQ Eastern Region Office
300 SE Reed Market Rd.
Bend, OR 97702-2237
Phone: (541) 388-6146
Hours: 8 am - 5 pm

DEQ Western Region Office
(Benton, Lincoln, Marion,
Polk, and Yamhill counties)
750 Front St NE, #120
Salem, OR 97301-1039
Phone: (503) 378-8240
Hours: Mon - Thurs: 8 am - 5 pm
Fri: 8 am - noon, 1 - 5 pm

DEQ Western Region Office
(Lane and Linn counties)
1102 Lincoln St. Suite 210
Eugene, OR 97401
Phone: (541) 686-7838
Hours: 8 am - 5 pm

DEQ Western Region Office
(Coos, Curry, Douglas, Jackson,
and Josephine counties)
221 Stewart Ave. Suite 201
Medford, OR 97501
Phone: (541) 776-6010
Hours: 8 am - noon, 1 - 5 pm

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Tuesday, February 16, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: General / [none]

Enclosed are the results of analyses for work order A10B071, which was received by the laboratory on 2/5/2010 at 1:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:

02/16/10 16:19

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stormwater	A10B071-01	Water	02/05/10 12:35	02/05/10 13:40

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:

02/16/10 16:19

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater (A10B071-01)			Matrix: Water		Batch: 1002154			
Copper	0.00518	---	0.00400	mg/L	1	02/11/10 15:41	EPA 200.8	
Lead	0.00100	---	0.00100	"	"	"	"	
Zinc	0.0297	---	0.00400	"	"	"	"	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:

02/16/10 16:19

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater (A10B071-01)			Matrix: Water		Batch: 1002108			
HEM (Oil and Grease)	ND	---	4.72	mg/L	1	02/08/10 10:34	EPA 1664	O-01
pH	6.85	---		pH Units	"	02/05/10 15:31	EPA 150.1	
pH Temperature (deg C)	16.3	---		"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	02/09/10 17:30	SM 2540 D	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:

02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002154 - EPA 3015A						Water						
Blank (1002154-BLK1)				Prepared: 02/10/10 09:40		Analyzed: 02/11/10 13:32						
EPA 200.8												
Copper	ND	---	0.00400	mg/L	1	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (1002154-BS1)				Prepared: 02/10/10 09:40		Analyzed: 02/11/10 13:35						
EPA 200.8												
Copper	0.0615	---	0.00400	mg/L	1	0.0556	---	111	85-115%	---	---	
Lead	0.0555	---	0.00100	"	"	"	---	100	"	---	---	
Zinc	0.0573	---	0.00400	"	"	"	---	103	"	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5	Project: General	
15550 N Lombard	Project Number: [none]	Reported:
Portland, OR 97203	Project Manager: Katrina Greene	02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002103 - Method Prep: Aq						Water						
Duplicate (1002103-DUP1)				Prepared: 02/05/10 15:12		Analyzed: 02/05/10 15:33						
QC Source Sample: Stormwater (A10B071-01)												
EPA 150.1												
pH	6.88	---		pH Units	1	---	6.85	---	---	0.4	10%	
pH Temperature (deg C)	16.4	---		"	"	---	16.3	---	---	0.6	10%	
Reference (1002103-SRM1)				Prepared: 02/05/10 15:12		Analyzed: 02/05/10 15:26						
EPA 150.1												
pH	6.04	---		pH Units	1	6.00		101	98.4-101.7%	---	---	
Reference (1002103-SRM2)				Prepared: 02/05/10 15:12		Analyzed: 02/05/10 15:34						
EPA 150.1												
pH	7.97	---		pH Units	1	8.00		100	98.74-101.26%	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:

02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002108 - EPA 1664						Water						
Blank (1002108-BLK1)				Prepared: 02/06/10 07:48 Analyzed: 02/08/10 10:34								
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Blank (1002108-BLK2)				Prepared: 02/06/10 07:48 Analyzed: 02/08/10 17:20								
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (1002108-BS1)				Prepared: 02/06/10 07:48 Analyzed: 02/08/10 10:34								
EPA 1664												
HEM (Oil and Grease)	35.6	---		mg/L	1	40.0	---	89	78-114%	---	---	
LCS (1002108-BS2)				Prepared: 02/06/10 07:48 Analyzed: 02/08/10 17:20								
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	17.9	---		mg/L	1	20.0	---	90	64-132%	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5	Project: General	
15550 N Lombard	Project Number: [none]	Reported:
Portland, OR 97203	Project Manager: Katrina Greene	02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002136 - Total Suspended Solids							Water					
Blank (1002136-BLK1)					Prepared: 02/09/10 10:24		Analyzed: 02/09/10 17:30					
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Reference (1002136-SRM1)					Prepared: 02/09/10 10:24		Analyzed: 02/10/10 10:15					
SM 2540 D												
Total Suspended Solids	95.7	---		mg/L	1	87.9		109	90-110%	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5	Project: General	
15550 N Lombard	Project Number: [none]	Reported:
Portland, OR 97203	Project Manager: Katrina Greenc	02/16/10 16:19

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002154							
A10B071-01	Water	EPA 200.8	02/05/10 12:35	02/10/10 09:40	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: EPA 1664					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002108							
A10B071-01	Water	EPA 1664	02/05/10 12:35	02/06/10 07:48	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Ag					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor

Batch: 1002103							
A10B071-01	Water	EPA 150.1	02/05/10 12:35	02/05/10 15:12	20mL/20mL	20mL/20mL	NA

Prep: Total Suspended Solids					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002136							
A10B071-01	Water	SM 2540 D	02/05/10 12:35	02/09/10 10:24	1N/A/1N/A	1N/A/1mL	NA



Kinder Morgan Terminal 5	Project: General	Reported:
15550 N Lombard	Project Number: [none]	02/16/10 16:19
Portland, OR 97203	Project Manager: Katrina Greene	

Notes and Definitions

Qualifiers:

O-01 Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Reported:
02/16/10 16:19

Apex Laboratories

KMB00010039

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, March 5, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: General / [none]

Enclosed are the results of analyses for work order A10B241, which was received by the laboratory on 2/24/2010 at 1:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 11:49

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Storm Water	A10B241-01	Water	02/24/10 11:50	02/24/10 13:40

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 11:49

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Storm Water (A10B241-01)			Matrix: Water	Batch: 1002416				
Copper	0.00414	---	0.00400	mg/L	1	02/26/10 15:07	EPA 200.8	
Lead	ND	---	0.00100	"	"	"	"	
Zinc	0.0529	---	0.00400	"	"	"	"	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 11:49

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Storm Water (A10B241-01)			Matrix: Water		Batch: 1002379			
HEM (Oil and Grease)	ND	---	4.67	mg/L	1	02/25/10 10:52	EPA 1664	O-01
pH	6.92	---		pH Units	"	02/24/10 15:52	EPA 150.1	
pH Temperature (deg C)	19.8	---		"	"	"	"	
Total Suspended Solids	ND	---	5.00	mg/L	"	02/26/10 12:00	SM 2540 D	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:

03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002416 - EPA 3015A						Water						
Blank (1002416-BLK1)				Prepared: 02/25/10 14:19 Analyzed: 02/26/10 13:56								
EPA 200.8												
Copper	ND	---	0.00400	mg/L	1	---	---	---	---	---	---	
Lead	ND	---	0.00100	"	"	---	---	---	---	---	---	
Zinc	ND	---	0.00400	"	"	---	---	---	---	---	---	
LCS (1002416-BS1)				Prepared: 02/25/10 14:19 Analyzed: 02/26/10 13:59								
EPA 200.8												
Copper	0.0545	---	0.00400	mg/L	1	0.0556	---	98	85-115%	---	---	
Lead	0.0546	---	0.00100	"	"	"	---	98	"	---	---	
Zinc	0.0558	---	0.00400	"	"	"	---	100	"	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002379 - EPA 1664						Water						
Blank (1002379-BLK1)					Prepared: 02/24/10 08:20		Analyzed: 02/24/10 16:13					
EPA 1664												
HEM (Oil and Grease)	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
LCS (1002379-BS1)					Prepared: 02/24/10 08:20		Analyzed: 02/24/10 16:13					
EPA 1664												
HEM (Oil and Grease)	40.6	---		mg/L	1	40.0	---	102	78-114%	---	---	

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Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002382 - Method Prep: Aq						Water						
Reference (1002382-SRM1)						Prepared: 02/24/10 08:31		Analyzed: 02/24/10 09:39				
EPA 150.1												
pH	6.00	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1002382-SRM2)						Prepared: 02/24/10 08:31		Analyzed: 02/24/10 10:05				
EPA 150.1												
pH	7.94	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1002382-SRM3)						Prepared: 02/24/10 08:31		Analyzed: 02/24/10 10:19				
EPA 150.1												
pH	6.03	---		pH Units	1	6.00		100	98.4-101.7%	---	---	
Reference (1002382-SRM4)						Prepared: 02/24/10 08:31		Analyzed: 02/24/10 15:50				
EPA 150.1												
pH	7.91	---		pH Units	1	8.00		99	98.74-101.26%	---	---	
Reference (1002382-SRM5)						Prepared: 02/24/10 08:31		Analyzed: 02/24/10 15:54				
EPA 150.1												
pH	5.98	---		pH Units	1	6.00		100	98.4-101.7%	---	---	

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Allison Greiner For Darwin Thomas, Business Development Director

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KMB00010046

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: General
Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002422 - Total Suspended Solids						Water						
Blank (1002422-BLK1)					Prepared: 02/26/10 08:39		Analyzed: 02/26/10 12:00					
SM 2540 D												
Total Suspended Solids	ND	---	5.00	mg/L	1	---	---	---	---	---	---	
Reference (1002422-SRM1)					Prepared: 02/26/10 08:39		Analyzed: 02/26/10 12:00					
SM 2540 D												
Total Suspended Solids	91.0	---		mg/L	1	100		91	90-110%	---	---	

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Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 11:49

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.8 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002416							
A10B241-01	Water	EPA 200.8	02/24/10 11:50	02/25/10 14:19	45mL/50mL	45mL/50mL	1.00

Conventional Chemistry Parameters

Prep: EPA 1664

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002379							
A10B241-01	Water	EPA 1664	02/24/10 11:50	02/24/10 13:00	1N/A/1N/A	1N/A/1mL	NA

Prep: Method Prep: Ag

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002382							
A10B241-01	Water	EPA 150.1	02/24/10 11:50	02/24/10 15:00	20mL/20mL	20mL/20mL	NA

Prep: Total Suspended Solids

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002422							
A10B241-01	Water	SM 2540 D	02/24/10 11:50	02/26/10 08:39	1N/A/1N/A	1N/A/1mL	NA

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Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: General

Project Number: [none]
Project Manager: Katrina Greene

Reported:

03/05/10 11:49

Notes and Definitions

Qualifiers:

O-01 Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
RPD Relative Percent Difference
MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: General

Project Number: [none]
Project Manager: Katrina Greene

Reported:

03/05/10 11:49

CHAIN OF CUSTODY

APEX LABS

2222 S.W. Garden Place, Tigard, OR 97223 Ph: 503-718-2323 Fax: 503-718-0133

202

2

[illegible]

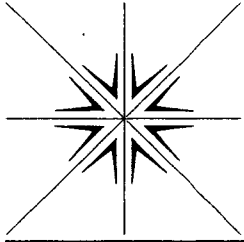
Apex Laboratories

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Allison Greiner For Darwin Thomas, Business Development Director

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KMB00010050



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

TO: Whom it May Concern

RE: December 2009 Storm Water Sampling- Kinder Morgan T-5 Portland, OR

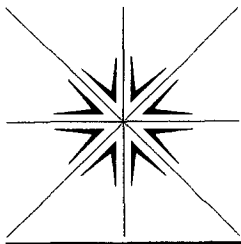
Specialty Analytical collected storm water samples on 12/16/2009 and 12/30/2009. Due to laboratory error in processing the final reports, the results from the 16 December 2009 sampling were provided to the client after the results from the 30 December 2009 sampling. There was an apparent exceedence on the 16 December samples; however, the client was not in receipt of this information until 15 January 2010, when the sample results were provided to the client. Any lapse in reporting the exceedence is due to the lag in receipt of sample results from the laboratory.

Please contact us if there are any further questions on this issue.

Sincerely,

A handwritten signature in black ink, appearing to read 'Marty French', with a large, stylized flourish at the end.

Marty French
Lab Director



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

January 15, 2010

Jack Waller
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203

TEL: (503) 285-4500

FAX: (503) 285-7733

RE: Storm Water Fall '09

Dear Jack Waller:

Order No.: 0912221

Specialty Analytical received 1 sample on 12/31/2009 for the analyses presented in the following report.

REVISED REPORT VERSION 1. Please see case narrative for information on revision.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.


Cindy Bilyard

Project Manager


Technical Review

Specialty Analytical**Date:** 15-Jan-10

CLIENT: Kinder Morgan Bulk Terminal #5
Project: Storm Water Fall '09
Lab Order: 0912221

CASE NARRATIVE

Report Revision 1.

Data was reviewed and corrected values are included for zinc by EPA 200.7.

Specialty Analytical

Date: 15-Jan-10

CLIENT: Kinder Morgan Bulk Terminal #5
Project: Storm Water Fall '09**Lab Order:** 0912221**Lab ID:** 0912221-01
Client Sample ID: Storm Water**Collection Date:** 12/31/2009 8:41:00 AM**Matrix:** STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS						
		E200.7				Analyst: zau
Chromium	0.00940	0.00500		mg/L	1	1/5/2010 5:44:12 PM
Copper	ND	0.0100		mg/L	1	1/5/2010 5:44:12 PM
Lead	ND	0.0200		mg/L	1	1/5/2010 5:44:12 PM
Zinc	0.0863	0.0100		mg/L	1	1/5/2010 5:44:12 PM
E.COLI.						
		SM9221F				Analyst: kh
E.coli	4.10	2.00		MPN/100ml	1	12/31/2009 10:00:00 AM
PH - FIELD DETERMINATION						
		M4500-H				Analyst: mjf
pH	6.7			pH Units	1	12/31/2009
POLAR/NON-POLAR OIL AND GREASE						
		E1664				Analyst: jrj
HEM (Total Hexane Extractable Material)	ND	5.00		mg/L	1	1/5/2010
TOTAL PHOSPHATE AS P IN WATER						
		E365.2				Analyst: en
Phosphorus, Total	0.0782	0.0200		mg/L	1	1/6/2010
TOTAL SUSPENDED SOLIDS						
		E160.2				Analyst: en
Total Suspended Solids	39.0	5.00		mg/L	1	1/4/2010

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912221
Project: Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT**TestCode: 1664_SPE**

Sample ID: MB-R59130	SampType: MBLK	TestCode: 1664_SPE	Units: mg/L	Prep Date:	Run ID: WETCHEM_100105B						
Client ID: ZZZZZ	Batch ID: R59130	TestNo: E1664		Analysis Date: 1/5/2010	SeqNo: 650921						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total Hexane Extractable Materia	ND	5.00									

Sample ID: LCS-R59130	SampType: LCS	TestCode: 1664_SPE	Units: mg/L	Prep Date:	Run ID: WETCHEM_100105B						
Client ID: ZZZZZ	Batch ID: R59130	TestNo: E1664		Analysis Date: 1/5/2010	SeqNo: 650920						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total Hexane Extractable Materia	33.4	5.00	40	0	83.5	78	114	0	0		

Sample ID: LCSD-R59130	SampType: LCSD	TestCode: 1664_SPE	Units: mg/L	Prep Date:	Run ID: WETCHEM_100105B						
Client ID: ZZZZZ	Batch ID: R59130	TestNo: E1664		Analysis Date: 1/5/2010	SeqNo: 650922						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total Hexane Extractable Materia	36	5.00	40	0	90	78	114	33.4	7.49	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912221
Project: Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: MBLK-24722	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650880						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.00500									
Copper	ND	0.0100									
Lead	ND	0.0200									
Zinc	0.0018	0.0100									J

Sample ID: LCS-24722	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650881						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2822	0.00500	0.25	0	113	93.9	113	0	0		
Copper	0.5386	0.0100	0.5	0	108	89.7	117	0	0		

Sample ID: LCS-24722	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/6/2010	SeqNo: 651040						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.039	0.0200	1	0	104	93.1	112	0	0		
Zinc	0.518	0.0100	0.5	0.0018	103	92.3	111	0	0		

Sample ID: 0912227-01BMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650884						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.3281	0.00500	0.25	0.061	107	93.4	112	0	0		
Copper	0.5502	0.0100	0.5	0.0389	102	92.7	114	0	0		
Lead	1.107	0.0200	1	0	111	91.9	112	0	0		
Zinc	16.69	0.0100	0.5	16.97	-56	93	110	0	0		S,MC

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912221
Project: Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: 0912227-01BMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650885						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.3246	0.00500	0.25	0.061	105	93.4	112	0.3281	1.07	20	
Copper	0.5611	0.0100	0.5	0.0389	104	92.7	114	0.5502	1.96	20	
Lead	1.116	0.0200	1	0	112	91.9	112	1.107	0.810	20	
Zinc	16.68	0.0100	0.5	16.97	-58	93	110	16.69	0.0599	20	S,MC

Sample ID: 0912227-01BDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650883						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.0617	0.00500	0	0	0	0	0	0.061	1.14	20	
Copper	0.038	0.0100	0	0	0	0	0	0.0389	2.34	20	
Lead	ND	0.0200	0	0	0	0	0	0	0	20	
Zinc	16.4	0.0100	0	0	0	0	0	16.97	3.42	20	

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650879						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2508	0.00500	0.25	0	100	90	110	0	0		
Copper	0.4879	0.0100	0.5	0	97.6	90	110	0	0		
Lead	1.011	0.0200	1	0	101	90	110	0	0		
Zinc	0.5058	0.0100	0.5	0	101	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650888						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2616	0.00500	0.25	0	105	90	110	0	0		
Copper	0.495	0.0100	0.5	0	99	90	110	0	0		
Lead	1.051	0.0200	1	0	105	90	110	0	0		
Zinc	0.5243	0.0100	0.5	0	105	90	110	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912221
Project: Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650899						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2648	0.00500	0.25	0	106	90	110	0	0		
Copper	0.4928	0.0100	0.5	0	98.6	90	110	0	0		
Lead	1.048	0.0200	1	0	105	90	110	0	0		
Zinc	0.5281	0.0100	0.5	0	106	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/6/2010	SeqNo: 651041						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.021	0.0200	1	0	102	90	110	0	0		
Zinc	0.5075	0.0100	0.5	0	102	90	110	0	0		

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650878						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2552	0.00500	0.25	0	102	95	105	0	0		
Copper	0.4923	0.0100	0.5	0	98.5	95	105	0	0		
Lead	1.006	0.0200	1	0	101	95	105	0	0		
Zinc	0.5067	0.0100	0.5	0	101	95	105	0	0		

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/6/2010	SeqNo: 651039						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1.031	0.0200	1	0	103	95	105	0	0		
Zinc	0.5167	0.0100	0.5	0	103	95	105	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912221
Project: Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: P-TOTAL

Sample ID: MB-R59136	SampType: MBLK	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_100106A						
Client ID: ZZZZZ	Batch ID: R59136	TestNo: E365.2		Analysis Date: 1/6/2010	SeqNo: 650990						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total ND 0.0200

Sample ID: LCS-R59136	SampType: LCS	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_100106A						
Client ID: ZZZZZ	Batch ID: R59136	TestNo: E365.2		Analysis Date: 1/6/2010	SeqNo: 650989						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total 0.7536 0.0200 0.8143 0 92.5 82.1 110 0 0

Sample ID: 0912209-02DMS	SampType: MS	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_100106A						
Client ID: ZZZZZ	Batch ID: R59136	TestNo: E365.2		Analysis Date: 1/6/2010	SeqNo: 650984						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total 0.3348 0.0200 0.3257 0.0342 92.3 77.2 117 0 0

Sample ID: 0912209-02DMSD	SampType: MSD	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_100106A						
Client ID: ZZZZZ	Batch ID: R59136	TestNo: E365.2		Analysis Date: 1/6/2010	SeqNo: 650985						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total 0.3365 0.0200 0.3257 0.0342 92.8 77.2 117 0.3348 0.506 20

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912221
Project: Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: TSS_WW

Sample ID: MB-R59112	SampType: MBLK	TestCode: TSS_WW	Units: mg/L	Prep Date:	Run ID: WETCHEM_100104B
Client ID: ZZZZZ	Batch ID: R59112	TestNo: E160.2		Analysis Date: 1/4/2010	SeqNo: 650728
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids ND 5.00

Sample ID: LCS-R59112	SampType: LCS	TestCode: TSS_WW	Units: mg/L	Prep Date:	Run ID: WETCHEM_100104B
Client ID: ZZZZZ	Batch ID: R59112	TestNo: E160.2		Analysis Date: 1/4/2010	SeqNo: 650728
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids 94 5.00 100 0 94 80 105 0 0

Sample ID: 0912221-01CDUP	SampType: DUP	TestCode: TSS_WW	Units: mg/L	Prep Date:	Run ID: WETCHEM_100104B
Client ID: Storm Water	Batch ID: R59112	TestNo: E160.2		Analysis Date: 1/4/2010	SeqNo: 650721
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids 43 5.00 0 0 0 0 0 39 9.76 20

Sample ID: A0912210-01BDUP	SampType: DUP	TestCode: TSS_WW	Units: mg/L	Prep Date:	Run ID: WETCHEM_100104B
Client ID: ZZZZZ	Batch ID: R59112	TestNo: E160.2		Analysis Date: 1/4/2010	SeqNo: 650726
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids 11 5.00 0 0 0 0 0 10 9.52 20

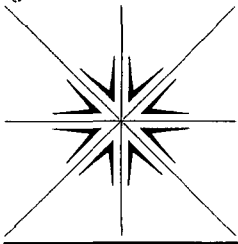
Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

December 28, 2009

Jack Waller
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203
TEL: (503) 285-4500
FAX: (503) 285-7733

RE: Storm Water
Dear Jack Waller:


Order No.: 0912192

Specialty Analytical received 1 sample on 12/16/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,


Cindy Hillyard
Project Manager


Technical Review

Specialty Analytical

Date: 15-Jan-10

CLIENT: Kinder Morgan Bulk Terminal #5
Lab Order: 0912192
Project: Storm Water
Lab ID: 0912192-01

Client Sample ID: Storm Water
Collection Date: 12/16/2009 9:25:00 AM

Matrix: STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		E200.7				Analyst: zau
Chromium	0.00580	0.00500		mg/L	1	12/17/2009
Copper	0.104	0.0100		mg/L	1	12/17/2009
Lead	0.016	0.0200	J	mg/L	1	12/17/2009
Zinc	0.642	0.0100		mg/L	1	12/17/2009
E.COLI.		SM9221F				Analyst: jrp
E.coli	46.2	2.00		MPN/100ml	1	12/16/2009 4:25:00 PM
PH - FIELD DETERMINATION		M4500-H				Analyst: mjf
pH	6.8			pH Units	1	12/16/2009
POLAR/NON-POLAR OIL AND GREASE		E1664				Analyst: jrp
HEM (Total Hexane Extractable Material)	6.20	5.00		mg/L	1	12/22/2009
TOTAL PHOSPHATE AS P IN WATER		E365.2				Analyst: en
Phosphorus, Total	0.246	0.0200		mg/L	1	12/22/2009
TOTAL SUSPENDED SOLIDS		E160.2				Analyst: en
Total Suspended Solids	26.0	5.00		mg/L	1	12/18/2009

CLIENT: Kinder Morgan Bulk Terminal #5

Work Order: 0912192

Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 1664_SPE

Sample ID: MB-R58923	SampType: MBLK	TestCode: 1664_SPE	Units: mg/L	Prep Date:	Run ID: WETCHEM_091222A						
Client ID: ZZZZZ	Batch ID: R58923	TestNo: E1664		Analysis Date: 12/22/2009	SeqNo: 647724						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

HEM (Total Hexane Extractable Materia	0.9	5.00									J
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Sample ID: LCS-R58923	SampType: LCS	TestCode: 1664_SPE	Units: mg/L	Prep Date:	Run ID: WETCHEM_091222A						
Client ID: ZZZZZ	Batch ID: R58923	TestNo: E1664		Analysis Date: 12/22/2009	SeqNo: 647722						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

HEM (Total Hexane Extractable Materia	33.8	5.00	40	0.9	82.2	78	114	0	0		
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Sample ID: LCSD-R58923	SampType: LCSD	TestCode: 1664_SPE	Units: mg/L	Prep Date:	Run ID: WETCHEM_091222A						
Client ID: ZZZZZ	Batch ID: R58923	TestNo: E1664		Analysis Date: 12/22/2009	SeqNo: 647723						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

HEM (Total Hexane Extractable Materia	33	5.00	40	0.9	80.2	78	114	33.8	2.40	20	
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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912192
Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: MBLK-24605	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646246						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	ND	0.00500
Copper	ND	0.0100
Lead	ND	0.0200
Zinc	ND	0.0100

Sample ID: LCS-24605	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646247						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2573	0.00500	0.25	0	103	93.9	113	0	0
Copper	0.4952	0.0100	0.5	0	99	89.7	117	0	0
Lead	1.023	0.0200	1	0	102	93.1	112	0	0
Zinc	0.5051	0.0100	0.5	0	101	92.3	111	0	0

Sample ID: A0912115-02CMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646250						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2641	0.00500	0.25	0	106	93.4	112	0	0
Copper	0.5185	0.0100	0.5	0.0061	102	92.7	114	0	0
Lead	1.053	0.0200	1	0	105	91.9	112	0	0
Zinc	0.6192	0.0100	0.5	0.097	104	93	110	0	0

Sample ID: A0912115-02CMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646251						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2556	0.00500	0.25	0	102	93.4	112	0.2641	3.27	20
Copper	0.505	0.0100	0.5	0.0061	99.8	92.7	114	0.5185	2.64	20
Lead	1.025	0.0200	1	0	103	91.9	112	1.053	2.69	20
Zinc	0.6003	0.0100	0.5	0.097	101	93	110	0.6192	3.10	20

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912192
Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: A0912115-02CDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646249						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	ND	0.00500	0	0	0	0	0	0	0	20	
Copper	0.0073	0.0100	0	0	0	0	0	0.0061	0	20	J
Lead	ND	0.0200	0	0	0	0	0	0	0	20	
Zinc	0.0962	0.0100	0	0	0	0	0	0.097	0.828	20	

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646245						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2491	0.00500	0.25	0	99.6	90	110	0	0		
Copper	0.4721	0.0100	0.5	0	94.4	90	110	0	0		
Lead	0.9884	0.0200	1	0	98.8	90	110	0	0		
Zinc	0.4974	0.0100	0.5	0	99.5	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646252						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2406	0.00500	0.25	0	96.2	90	110	0	0		
Copper	0.4807	0.0100	0.5	0	96.1	90	110	0	0		
Lead	0.9894	0.0200	1	0	98.9	90	110	0	0		
Zinc	0.4939	0.0100	0.5	0	98.8	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646263						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2462	0.00500	0.25	0	98.5	90	110	0	0		
Copper	0.4688	0.0100	0.5	0	93.8	90	110	0	0		
Lead	0.979	0.0200	1	0	97.9	90	110	0	0		
Zinc	0.4894	0.0100	0.5	0	97.9	90	110	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912192
Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2498	0.00500	0.25	0	99.9	90	110	0	0		
Copper	0.4731	0.0100	0.5	0	94.6	90	110	0	0		
Lead	0.9866	0.0200	1	0	98.7	90	110	0	0		
Zinc	0.4964	0.0100	0.5	0	99.3	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646642						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper	0.4767	0.0100	0.5	0	95.3	90	110	0	0		
Lead	1.001	0.0200	1	0	100	90	110	0	0		
Zinc	0.5024	0.0100	0.5	0	100	90	110	0	0		

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646244						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2574	0.00500	0.25	0	103	95	105	0	0		
Copper	0.5019	0.0100	0.5	0	100	95	105	0	0		
Lead	1.036	0.0200	1	0	104	95	105	0	0		
Zinc	0.5163	0.0100	0.5	0	103	95	105	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912192
Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: P-TOTAL

Sample ID: MB-R58927	SampType: MBLK	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_091222A						
Client ID: ZZZZZ	Batch ID: R58927	TestNo: E365.2		Analysis Date: 12/22/2009	SeqNo: 647792						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total ND 0.0200

Sample ID: LCS-R58927	SampType: LCS	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_091222A						
Client ID: ZZZZZ	Batch ID: R58927	TestNo: E365.2		Analysis Date: 12/22/2009	SeqNo: 647791						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total 0.7638 0.0200 0.8143 0 93.8 82.1 110 0 0

Sample ID: 0912115-01BMS	SampType: MS	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_091222A						
Client ID: ZZZZZ	Batch ID: R58927	TestNo: E365.2		Analysis Date: 12/22/2009	SeqNo: 647776						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total 0.323 0.0200 0.3257 0 99.2 77.2 117 0 0

Sample ID: 0912115-01BMSD	SampType: MSD	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_091222A						
Client ID: ZZZZZ	Batch ID: R58927	TestNo: E365.2		Analysis Date: 12/22/2009	SeqNo: 647777						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Phosphorus, Total 0.318 0.0200 0.3257 0 97.6 77.2 117 0.323 1.56 20

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912192
Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: TSS_WW

Sample ID: MB-R58882	SampType: MBLK	TestCode: TSS_WW	Units: mg/L	Prep Date: 12/18/2009	Run ID: WETCHEM_091218C
Client ID: ZZZZZ	Batch ID: R58882	TestNo: E160.2		Analysis Date: 12/18/2009	SeqNo: 647126
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids ND 5.00

Sample ID: LCS-R58882	SampType: LCS	TestCode: TSS_WW	Units: mg/L	Prep Date: 12/18/2009	Run ID: WETCHEM_091218C
Client ID: ZZZZZ	Batch ID: R58882	TestNo: E160.2		Analysis Date: 12/18/2009	SeqNo: 647125
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids 100 5.00 100 0 100 80 105 0 0

Sample ID: 0912109-02ADUP	SampType: DUP	TestCode: TSS_WW	Units: mg/L	Prep Date: 12/18/2009	Run ID: WETCHEM_091218C
Client ID: ZZZZZ	Batch ID: R58882	TestNo: E160.2		Analysis Date: 12/18/2009	SeqNo: 647113
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids 56 5.00 0 0 0 0 0 52 7.41 20

Sample ID: 0912117-01BDUP	SampType: DUP	TestCode: TSS_WW	Units: mg/L	Prep Date: 12/18/2009	Run ID: WETCHEM_091218C
Client ID: ZZZZZ	Batch ID: R58882	TestNo: E160.2		Analysis Date: 12/18/2009	SeqNo: 647122
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Total Suspended Solids 14 5.00 0 0 0 0 0 13 7.41 20

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

Contact Person/Project Manager Jack Waller
Company KM T-5
Address 15550 N. Lombard
Portland OR 97203
Phone _____ Fax _____
Project No. Storm Water Project Name _____
Project Site Location OR X WA _____ Other _____
Invoice To _____ P.O. No. _____

Printed.

Printed_

☐ Rush

Rush Analyses Must Be Scheduled With The Lab In Advance

[illegible]

Pink-Customer Copy

KMB00010072

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF June 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	Rain	N/A	/			/	/			/	/		/		
17	KM	Clear	RSTD	/			/	/			/	/		/		
18	MH	Clear	750m	/			/	/			/	/		/		
19	MH	Cloudy	N/A	/			/	/			/	/		/		
20	MH	Cloudy	FLI2	/			/	/			/	/		/		
21	KM	Cloudy	76PN	/			/	/			/	/		/		
22	KM	Cloudy	N/A	/			/	/			/	/		/		
23	KM	Partly Cloudy	N/A	/			/	/			/	/		/		
24	KM	Clear	N/A	/			/	/			/	/		/		
25	MH	Cloudy	76PN	/			/	/			/	/		/		
26	MH	Cloudy	76PN	/			/	/			/	/		/		
27	MH	Clear	N/A	/			/	/			/	/		/		
28	KM	Partly Cloudy	76PN	/			/	/			/	/		/		
29	KM	Cloudy	N/A	/			/	/			/	/		/		
30	KM	Partly Cloudy	76PN	/			/	/			/	/		/		
31																

MANAGER SIGNATURE:

[Signature] DATE: 7/2/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF June 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Cloudy	RESS	/		/		/			/		/			
2	KM	Rain	G-SIS	/		/		/			/		/			
3	KM	Cloudy	7Yhm	/		/		/			/		/			
4	MH	Shower	N/A	/		/		/			/		/			
5	MH	pclear	42IS	/		/		/			/		/			
6	MH	Rain	RSID	/		/		/			/		/			
7	KM	Cloudy	7Yhm	/		/		/			/		/			
8	KM	Clear	7Yhm	/		/		/			/		/			
9	KM	Rain	7Yhm	/		/		/			/		/			
10	KM	Cloudy	74I4	/		/		/			/		/			
11	KM	Cloudy	7Yhm	/		/		/			/		/			
12	MH	pclear	61I4	/		/		/			/		/			
13	MH	Clear	G5IS	/		/		/			/		/			
14	KM	cloudy	74I4	/		/		/			/		/			
15	KM	Rain	C4I4	/		/		/			/		/			

Routing: Please check box when reviewed
☐ 2. Terminal Manager
☐ 3. Assistant

Distribution:
 Original to File
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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF May 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	m H	Cloudy	7Hm	/			/	/			/	/		/		
17	km	Rain	7Hm	/			/	/			/	/		/		
18	km	Rain	5Hm	/		/		/			/	/		/		
19	km	Cloudy	RSTD	/			/	/			/	/		/		
20	km	Rain	42IS	/		/		/			/	/		/		
21	m H	Rain	WSTD	/		/		/			/	/		/		
22	m H	Cloudy	WSTD	/			/	/			/	/		/		
23	m H	Cloudy	42IS	/			/	/			/	/		/		
24	km	Cloudy	N/A	/			/	/			/	/		/		
25	km	Rain	N/A	/			/	/			/	/		/		
26	km	Rain	N/A	/			/	/			/	/		/		
27	km	Cloudy	N/A	/			/	/			/	/		/		
28	m H	Cloudy	2ESS	/			/	/			/	/		/		
29	m H	Cloudy	2ESS	/		/		/			/	/		/		
30	m H	Cloudy	41T1	/			/	/			/	/		/		
31	km	Rain	42IS	/			/	/			/	/		/		

MANAGER SIGNATURE:

[Signature]

DATE:

6/1/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF May 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	clear	N/A	/			/	/			/	/		/		
2	MH	clear	42IS	/			/	/			/	/		/		
3	KM	Rain	42IS	/			/	/			/	/		/		
4	KM	Rain	RSTD	/			/	/			/	/		/		
5	KM	cloudy	7/5m	/			/	/			/	/		/		
6	KM	clear	7/5m	/			/	/			/	/		/		
7	MH	clear	7/5m	/			/	/			/	/		/		
8	MH	clear	45IS	/			/	/			/	/		/		
9	MH	clear	RSTD	/			/	/			/	/		/		
10	KM	Rain	WSTD	/			/	/			/	/		/		
11	KM	clear	N/A	/			/	/			/	/		/		
12	KM	clear	N/A	/			/	/			/	/		/		
13	KM	clear	N/A	/			/	/			/	/		/		
14	MH	clear	N/A	/			/	/			/	/		/		
15	MH	clear	N/A	/			/	/			/	/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF April 2010

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	Km	Cloudy	7/2pm	/		/		/			/	/		/		
2	mH	Drain	7:25	/		/		/			/	/		/		
3	mH	Shower	7/2pm	/			/	/			/	/		/		
4	mH	Cloudy	N/A	/			/	/			/	/		/		
5	Km	Cloudy	GLT1	/			/	/			/	/		/		
6	Km	Cloudy	BSIS	/			/	/			/	/		/		
7	Km	Cloudy	N/A	/			/	/			/	/		/		
8	Km	Drain	N/A	/		/		/			/	/		/		
9	mH	Cloudy	WSTO	/			/	/			/	/		/		
10	mH	Clear	WSTO	/			/	/			/	/		/		
11	mH	Cloudy	N/A	/			/	/			/	/		/		
12	Bm	Shower	N/A	/		/		/			/	/		/		
13	Km	Shower	N/A	/		/		/			/	/		/		
14	Km	Cloudy	7/2pm	/		/		/			/	/		/		
15	Km	Cloudy	7/2pm	/		/		/			/	/		/		

Routing:	Please check box when reviewed
<input checked="" type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF April 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	MH	Clear	WSTD	/			/	/			/	/		/		
17	MH	Clear	N/A	/			/	/			/	/		/		
18	MH	Fog	72IS	/			/	/			/	/		/		
19	KM	Clear	N/A	/			/	/			/	/		/		
20	KM	Clear	N/A	/			/	/			/	/		/		
21	KM	Clear	72IS	/			/	/			/	/		/		
22	KM	Clear	N/A	/			/	/			/	/		/		
23	MH	Clear	72IS	/			/	/			/	/		/		
24	MH	Clear	65IS	/			/	/			/	/		/		
25	MH	Clear	N/A	/			/	/			/	/		/		
26	KM	Clear	72IS	/			/	/			/	/		/		
27	KM	Clear	72IS	/			/	/			/	/		/		
28	KM	Clear	WSTD	/			/	/			/	/		/		
29	KM	Clear	WSTD	/			/	/			/	/		/		
30	MH	Clear	72IS	/			/	/			/	/		/		
31																

MANAGER SIGNATURE:

[Signature]

DATE:

5/3/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF March 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	km	clearly	WESS	/			/	/			/	/		/		
2	km	clearly	N/A	/			/	/			/	/		/		
3	km	clearly	N/A	/			/	/			/	/		/		
4	km	clearly	N/A	/			/	/			/	/		/		
5	mt	clearly	N/A	/			/	/			/	/		/		
6	mt	clear	N/A	/			/	/			/	/		/		
7	mt	clear	N/A	/			/	/			/	/		/		
8	km	clearly	N/A	/			/	/			/	/		/		
9	km	clearly	G4I4	/			/	/			/	/		/		
10	km	clearly	N/A	/			/	/			/	/		/		
11	km	Shower	LOSTO	/			/	/			/	/		/		
12	mt	Down	N/A	/			/	/			/	/		/		
13	mt	Shower	41I4	/			/	/			/	/		/		
14	mt	clear	41I4	/			/	/			/	/		/		
15	km	clearly	RSTO	/			/	/			/	/		/		

Routing: Please check box when reviewed

☐ 1. Terminal Manager

☐ 3. Assistant

Distribution:

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF March 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	Bm	Cloudy	GLT4	/			/	/			/	/		/		
17	Bm	Cloudy	N/A	/			/	/			/	/		/		
18	Bm	Cloudy	GLT4	/			/	/			/	/		/		
19	MH	Clear	GSIS	/			/	/			/	/		/		
20	MH	Cloudy	GSIS	/			/	/			/	/		/		
21	MH	Shoes	RSTD	/			/	/			/	/		/		
22	Bm	Rain	RSTD	/			/	/			/	/		/		
23	Bm	Fog	7Hm	/			/	/			/	/		/		
24	Bm	Cloudy	7Hm	/			/	/			/	/		/		
25	Bm	Rain	LOSTD	/			/	/			/	/		/		
26	MH	Shoes	7Hm	/			/	/			/	/		/		
27	MH	Clear	7Hm	/			/	/			/	/		/		
28	MH	Rain	N/A	/			/	/			/	/		/		
29	Bm	Rain	N/A	/			/	/			/	/		/		
30	Bm	Rain	7Hm	/			/	/			/	/		/		
31	Bm	Cloudy	LOSTD	/			/	/			/	/		/		

MANAGER SIGNATURE:

[Signature]

DATE:

4/9/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF February 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	km	Rain	WESS	/			/	/			/	/		/		
2	km	Cloudy	RSTD	/			/	/			/	/		/		
3	km	Rain	7Hm	/			/	/			/	/		/		
4	MB	Cloudy	7Hm	/			/	/			/	/		/		
5	MH	Showers	WSTD	/			/	/			/	/		/		
6	MH	Cloudy	WTS	/			/	/			/	/		/		
7	MH	Cloudy	W/A	/			/	/			/	/		/		
8	km	Hail	7Hm	/			/	/			/	/		/		
9	km	Fog	WSTD	/			/	/			/	/		/		
10	km	Cloudy	WTS	/			/	/			/	/		/		
11	km	Cloudy	RSTD	/			/	/			/	/		/		
12	MH	Showers	RSTD	/			/	/			/	/		/		
13	MH	Showers	7Hm	/			/	/			/	/		/		
14	MH	Showers	7Hm	/			/	/			/	/		/		
15	km	Cloudy	RSTD	/			/	/			/	/		/		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

Original to File

Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF February 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	Km	Cloudy	61 I4	/		/		/		/		/		/		
17	Km	Cloudy	2 Ym	-		/		/		/		/		/		
18	Km	Cloudy	O/A	-		/		/		/		/		/		
19	MH	Clear	2 Ym	-		/		/		/		/		/		
20	MH	Clear	N/A	-		/		/		/		/		/		
21	MH	Clear	N/A	-		/		/		/		/		/		
22	Km	Cloudy	2 Ym	/		/		/		/		/		/		
23	Km	Cloudy	LOSTO	/		/		/		/		/		/		
24	Km	Rain	2 STD	-		/		/		/		/		/		
25	Km	Cloudy	41 I1	/		/		/		/		/		/		
26	MH	Showers	LOSTO	/		/		/		/		/		/		
27	MH	Cloudy	WESS	/		/		/		/		/		/		
28	MH	Cloudy	42 I5	/		/		/		/		/		/		
29																
30																
31																

MANAGER SIGNATURE:

[Signature] DATE: 3/1/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF January 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	mH	Shadows	41J1	/			/	/			/	/		/		
17	mH	Shadows	RESS	/			/	/			/	/		/		
18	km	Shadows	RESS	/			/	/			/	/		/		
19	km	Cloudy	5 Gm	/			/	/			/	/		/		
20	km	Cloudy	7 Gm	/			/	/			/	/		/		
21	km	Shadows	7 Gm	/			/	/			/	/		/		
22	mH	Cloudy	7 Gm	/			/	/			/	/		/		
23	mH	Cloudy	N/A	/			/	/			/	/		/		
24	mH	Cloudy	42J5	/			/	/			/	/		/		
25	km	Cloudy	7 Gm	/			/	/			/	/		/		
26	km	Fog	N/A	/			/	/			/	/		/		
27	km	Cloudy	7 Gm	/			/	/			/	/		/		
28	km	Cloudy	N/A	/			/	/			/	/		/		
29	mH	Cloudy	N/A	/			/	/			/	/		/		
30	mH	Cloudy	7 Gm	/			/	/			/	/		/		
31	mH	Cloudy	7 Gm	/			/	/			/	/		/		

MANAGER SIGNATURE:

Jack Wells

DATE:

2/1/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF January 2010

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	mlt	showers	N/A	/			/	/			/	/		/		
2	mlt	clearly	N/A	-			-	/			-	/		/		
3	mlt	showers	N/A	-			/	/			-	/		/		
4	km	Rain	RSTD	-			-	-			-	-		-		
5	km	Rain	WSTD	-			-	-			-	-		-		
6	km	clearly	N/A	-			-	/			-	/		/		
7	km	clearly	7:30am	/			-	/			-	/		/		
8	km	clearly	N/A	/			/	/			/	/		/		
9	mlt	clearly	N/A	/			/	/			/	/		/		
10	mlt	clearly	N/A	/			/	/			/	/		/		
11	km	showers	N/A	/			/	/			/	/		/		
12	km	clearly	7:30am	/			/	/			/	/		/		
13	km	Rain	7:30am	-			-	/			-	/		/		
14	km	clearly	OSTS	/			/	-			/	-		/		
15	mlt	clearly	7:15am	/			/	/			/	/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF December 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	km	Rain	WSTD	/			/	/			/	/		/		
17	km	Cloudy	7Hm	/			/	/			/	/		/		
18	mh	Cloudy	42IS	/			/	/			/	/		/		
19	mh	Shower	42IS	/			/	/			/	/		/		
20	mh	Shower	7Hm	/			/	/			/	/		/		
21	km	Rain	WESS	/			/	/			/	/		/		
22	km	Cloudy	WSTD	/			/	/			/	/		/		
23	km	Fog	N/A	/			/	/			/	/		/		
24	km	Fog	41IL	/			/	/			/	/		/		
25	km	Fog	N/A	/			/	/			/	/		/		
26	km	Clear	41IL	/			/	/			/	/		/		
27	mh	Cloudy	65IS	/			/	/			/	/		/		
28	km	Cloudy	WSTD	/			/	/			/	/		/		
29	km	Cloudy	7Hm	/			/	/			/	/		/		
30	km	Snow	7Hm	/			/	/			/	/		/		
31	km	Rain	N/A	/			/	/			/	/		/		

MANAGER SIGNATURE: Ischelle DATE: 1/6/10

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF December 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Clear	72Hn	/			/	/		/		/		/		
2	KM	Clear	RSTO	/			/	/		/		/		/		
3	KM	Clear	RSTO	/			/	/		/		/		/		
4	MH	Clear	RESS	/			/	/		/		/		/		
5	MH	Log	N/A	/			/	/		/		/		/		
6	MH	Clear	N/A	/			/	/		/		/		/		
7	KM	Clear	N/A	/			/	/		/		/		/		
8	KM	Clear	N/A	/			/	/		/		/		/		
9	KM	Clear	N/A	/			/	/		/		/		/		
10	KM	Clear	N/A	/			/	/		/		/		/		
11	MH	Clear	GLI1	/			/	/		/		/		/		
12	MH	Clear	GLI1	/			/	/		/		/		/		
13	MH	Clear	72IS	/			/	/		/		/		/		
14	KM	Clear	72IS	/			/	/		/		/		/		
15	KM	Rain	GSIS	/			/	/		/		/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

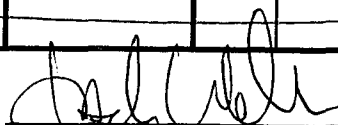
MONTH OF November 2009

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	Drain	N/A	/		/		/		/	/	/		/		plug in culvert
17	KM	Drain	N/A	/		/		/		/	/	/		/		
18	KM	cloudy	WSTD	/		/		/		/	/	/		/		
19	KM	Drain	GSIS	/		/		/		/	/	/		/		
20	MT	Shadows	N/A	/		/		/		/	/	/		/		
21	MT	Shadows	7/8 in	/		/		/		/	/	/		/		
22	MT	Drain	RSTD	/		/		/		/	/	/		/		
23	KM	Cloudy	WSTD	/		/		/		/	/	/		/		
24	KM	Cloudy	N/A	/		/		/		/	/	/		/		
25	KM	Fog	N/A	/		/		/		/	/	/		/		
26	KM	Drain	N/A	/		/		/		/	/	/		/		
27	MT	Shadows	WSTD	/		/		/		/	/	/		/		
28	MT	cloudy	N/A	/		/		/		/	/	/		/		
29	MT	cloudy	N/A	/		/		/		/	/	/		/		
30	KM	Cloudy	B1 F4	/		/		/		/	/	/		/		
31																

MANAGER SIGNATURE:

 DATE: 11/30/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF November 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Fog	WSTD	/			/	/			/	/		/		
2	KM	Fog	WSTD	/			/	/			/	/		/		
3	KM	Fog	BLIT	/			/	/			/	/		/		
4	KM	partly	N/A	/			/	/			/	/		/		
5	KM	clearly	N/A	/			/	/			/	/		/		
6	KM	clearly	WSTD	/			/	/			/	/		/		
7	MH	clearly	WSTD	/			/	/			/	/		/		
8	MH	Shower	N/A	/			/	/			/	/		/		
9	KM	clearly	N/A	/			/	/			/	/		/		
10	KM	clearly	N/A	/			/	/			/	/		/		
11	KM	Rain	KM	/			/	/			/	/		/		
12	KM	clearly	N/A	/			/	/			/	/		/		
13	MH	Rain	N/A	/			/	/			/	/		/		
14	MH	Rain	N/A	/		/		/			/	/		/		plug in Culvert
15	MH	Shower	N/A	/		/		/			/	/		/		plug in Culvert

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF October 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	MH	Clear	N/A	/		/		/		/		/		/		
17	MH	Cloudy	N/A	-		/		/		/		/		/		
18	KM	Showers	42TS	/		/		/		/		/		/		
19	MH	Cloudy	N/A	/		/		/		/		/		/		
20	KM	Cloudy	RSTD	/		/		/		/		/		/		
21	KM	Rain	42TS	/		/		/		/		/		/		
22	KM	Fog	42TS	/		/		/		/		/		/		
23	MH	Rain	N/A	/		/		/		/		/		/		Discharge @ C-7 to River Heavy Rain
24	CM	Cloudy	N/A	/		/		/		/		/		/		
25	MH	Fog	RSTD	/		/		/		/		/		/		
26	KM	Rain	RSTD	/		/		/		/		/		/		Heavy Rain During the day
27	KM	Showers	RSTD	/		/		/		/		/		/		
28	KM	Cloudy	N/A	/		/		/		/		/		/		
29	MH	Showers	Whin	/		/		/		/		/		/		
30	KM	Cloudy	RSTD	/		/		/		/		/		/		
31	MH	Showers	N/A	/		/		/		/		/		/		

MANAGER SIGNATURE:

[Signature]

DATE:

11/2/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF October 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	Km	Cloudy	42IS	/			/	/			/		/			
2	Km	Cloudy	6LI1	/			/	/			/		/			
3	CM	Cloudy	4LI4	/			/	/			/		/			
4	MH	Shadows	N/A	/			/	/			/		/			
5	Km	Fog	7Yhm	/			/	/			/		/			
6	Km	Fog	7Yhm	/			/	/			/		/			
7	Km	pCloudy	WSTD	/			/	/			/		/			
8	Km	Fog	WSTD	/			/	/			/		/			
9	MH	Clear	N/A	/			/	/			/		/			
10	MH	pCloudy	RESS	/			/	/			/		/			
11	MH	pCloudy	42IS	/			/	/			/		/			
12	Km	pCloudy	N/A	/			/	/			/		/			
13	Km	Cloudy	N/A	/			/	/			/		/			
14	Km	Drum	N/A	/			/	/			/		/			
15	Km	Cloudy	N/A	/			/	/			/		/			

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

Original to File

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PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF September 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	Bm	Clear	N/A	/			/	/			/	/		/		
17	Km	Clear	N/A	/			/	/			/	/		/		
18	MH	Clear	N/A	/			/	/			/	/		/		
19	MH	Clear	N/A	/			/	/			/	/		/		
20	MH	Clear	N/A	/			/	/			/	/		/		
21	Km	Clear	N/A	/			/	/			/	/		/		
22	Km	Clear	N/A	/			/	/			/	/		/		
23	Km	Clear	N/A	/			/	/			/	/		/		
24	Km	Clear	N/A	/			/	/			/	/		/		
25	MH	Clear	RSTO	/			/	/			/	/		/		
26	CM	Clear	N/A	/			/	/			/	/		/		
27	MH	Clear	N/A	/			/	/			/	/		/		
28	Km	Clear	N/A	/			/	/			/	/		/		
29	Km	Clear	N/A	/			/	/			/	/		/		
30	Km	Clear	N/A	/			/	/			/	/		/		
31																

MANAGER SIGNATURE:

DATE:

9/30/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF September 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	km	Cloudy	N/A	/			/	/			/	/		/		
2	km	Cloudy	7Hm	/			/	/			/	/		/		
3	km	Cloudy	7Hm	/			/	/			/	/		/		
4	mH	Cloudy	N/A	/			/	/			/	/		/		
5	mH	Rain	6STS	/			/	/			/	/		/		
6	mH	Shower	4LT1	/			/	/			/	/		/		
7	km	Cloudy	N/A	/			/	/			/	/		/		
8	mH	Fog	WSTD	/			/	/			/	/		/		
9	cm	Cloudy	7Hm	/			/	/			/	/		/		
10	km	Cloudy	7Hm	/			/	/			/	/		/		
11	km	Clear	7Hm	/			/	/			/	/		/		
12	cm	Clear	N/A	/			/	/			/	/		/		
13	mH	Cloudy	N/A	/			/	/			/	/		/		
14	mH	Cloudy	7Hm	/			/	/			/	/		/		
15	mH	Cloudy	7Hm	/			/	/			/	/		/		

Routing: Please check box when reviewed
☐ 2. Terminal Manager
☐ 3. Assistant

Distribution:
 Original to File
 Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF August 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Cloudy	7Bm	/			/	/			/	/		/		
2	MH	Clear	7Bm	/			/	/			/	/		/		
3	BM	Clear	42IS	/			/	/			/	/		/		
4	BM	Cloudy	42IS	/			/	/			/	/		/		
5	BM	Cloudy	42IS	/			/	/			/	/		/		
6	BM	Cloudy	N/A	/			/	/			/	/		/		
7	BM	Cloudy	42IS	/			/	/			/	/		/		
8	KM	Cloudy	N/A	/			/	/			/	/		/		
9	KM	Cloudy	N/A	/			/	/			/	/		/		
10	KM	Clear	N/A	/			/	/			/	/		/		
11	KM	Partly Cloudy	F2IS	/			/	/			/	/		/		
12	KM	Rain	F2IS	/			/	/			/	/		/		
13	KM	Partly Cloudy	F2IS	/			/	/			/	/		/		
14	MH	Cloudy	F2IS	/			/	/			/	/		/		
15	MH	Cloudy	N/A	/			/	/			/	/		/		

Routing: Please check box when reviewed
☐ 2. Terminal Manager
☐ 3. Assistant

Distribution:
 Original to File
 Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF August 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	MH	Partly cloudy	N/A	/			/	/			/	/		/		
17	KM	Clear	FZIS	/			/	/			/	/		/		
18	KM	Clear	FZIS	/			/	/			/	/		/		
19	KM	Clear	FZIS	/			/	/			/	/		/		
20	KM	Clear	FZIS	/			/	/			/	/		/		
21	MH	Cloudy	N/A	/			/	/			/	/		/		
22	MH	Partly cloudy	N/A	/			/	/			/	/		/		
23	MH	Clear	N/A	/			/	/			/	/		/		
24	KM	Cloudy	G1T1	/			/	/			/	/		/		
25	KM	Rain	G5IS	/			/	/			/	/		/		
26	KM	Clear	N/A	/			/	/			/	/		/		
27	KM	Clear	FZIS	/			/	/			/	/		/		
28	MH	Partly cloudy	N/A	/			/	/			/	/		/		
29	MH	Cloudy	WSTD	/			/	/			/	/		/		
30	MVA	Cloudy	RSTD	/			/	/			/	/		/		
31	Kan	Partly cloudy	RSTD	/			/	/			/	/		/		

MANAGER SIGNATURE:

DATE:

1 SEP 2009

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF July 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
1	Km	Clear	N/A	/				/				/		/		
2	Km	Clear	N/A	/				/				/		/		
3	mH	Clear	N/A	/				/				/		/		
4	mH	Clear	N/A	/				/				/		/		
5	mH	Clear	N/A	/				/				/		/		
6	Km	Cloudy	N/A	/				/				/		/		
7	Km	Cloudy	N/A	/				/				/		/		
8	Km	Cloudy	N/A	/				/				/		/		
9	Km	Cloudy	N/A	/				/				/		/		
10	mH	Cloudy	N/A	/				/				/		/		
11	mH	Clear	N/A	/				/				/		/		
12	mH	Cloudy	N/A	/				/				/		/		
13	Km	Cloudy	42 IS	/				/				/		/		
14	Km	Cloudy	41 IS	/				/				/		/		
15	Km	Clear	41 IS	/			/	/		/		/		/		* Started New form

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
Original to File
Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF July 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water pooled at the culvert under C7?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water level above the weir?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion <i>(Attach separate sheet if required)</i>
				YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
16	km	Clear	79hr	/			/	/			/	/		/		
17	mH	Clear	N/A	/			/	/			/	/		/		
18	mH	Clear	N/A	/			/	/			/	/		/		
19	mH	Clear	N/A	/			/	/			/	/		/		
20	km	Clear	N/A	/			/	/			/	/		/		
21	km	Clear	79hr	/			/	/			/	/		/		
22	km	Clear	N/A	/			/	/			/	/		/		
23	km	Clear	N/A	/			/	/			/	/		/		
24	mH	Clear	72IS	/			/	/			/	/		/		
25	mH	Clear	N/A	/			/	/			/	/		/		
26	mH	Clear	N/A	/			/	/			/	/		/		
27	mH	Clear	72IS	/			/	/			/	/		/		
28	km	Clear	72IS	/			/	/			/	/		/		
29	km	Clear	72IS	/			/	/			/	/		/		
30	km	Clear	72IS	/			/	/			/	/		/		
31	mH	Clear	6P5D	/			/	/			/	/		/		

MANAGER SIGNATURE:

[Signature]

DATE:

7/31/09

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011230

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: JULY

YEAR: 2009

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE: SKY				:PK WND		
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
12Z AVG MX 2MIN																		
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	87	55	71	5	0	6	0.00	0.0	0	8.3	21	320	M	M	0		28	320
2	96	58	77	11	0	12	0.00	0.0	0	6.4	15	320	M	M	1		21	320
3	92	59	76	10	0	11	0.00	0.0	0	4.6	12	330	M	M	1		15	330
4	92	59	76	9	0	11	0.00	0.0	0	5.4	10	290	M	M	3	8	14	280
5	86	59	73	6	0	8	0.00	0.0	0	8.0	20	260	M	M	6	8	23	270
6	70	58	64	-3	1	0	0.00	0.0	0	9.4	16	220	M	M	8		21	180
7	73	58	66	-1	0	1	0.00	0.0	0	4.8	14	320	M	M	8		18	310
8	68	56	62	-5	3	0	T	0.0	0	4.4	13	200	M	M	9		16	170
9	76	56	66	-1	0	1	0.00	0.0	0	5.9	16	310	M	M	5		43	90
10	89	58	74	6	0	9	0.00	0.0	0	6.6	10	180	M	M	6	3	12	190
11	79	60	70	2	0	5	0.00	0.0	0	6.0	12	310	M	M	5		24	150
12	65	58	62	-6	3	0	0.33	0.0	0	3.6	13	210	M	M	10	18	14	200
13	71	58	65	-3	0	0	0.01	0.0	0	6.9	15	220	M	M	9		20	190
14	80	58	69	1	0	4	0.00	0.0	0	7.1	15	320	M	M	5		22	320
15	89	58	74	6	0	9	0.00	0.0	0	4.6	15	310	M	M	2		20	330
16	93	62	78	10	0	13	0.00	0.0	0	5.2	15	300	M	M	2		18	320
17	95	64	80	11	0	15	0.00	0.0	0	4.9	13	320	M	M	4		16	310
18	86	61	74	5	0	9	0.00	0.0	0	7.8	20	330	M	M	4		24	320
19	83	56	70	1	0	5	0.00	0.0	0	8.5	17	320	M	M	1		22	320
20	92	60	76	7	0	11	0.00	0.0	0	6.7	17	320	M	M	3		24	320
21	90	64	77	8	0	12	0.00	0.0	0	5.2	13	350	M	M	0		17	310
22	82	58	70	1	0	5	0.00	0.0	0	6.0	15	320	M	M	2		21	320
23	76	60	68	-1	0	3	0.00	0.0	0	5.9	15	320	M	M	7		23	30
24	85	59	72	3	0	7	0.00	0.0	0	7.2	15	310	M	M	4		18	300
25	90	63	77	8	0	12	0.00	0.0	0	4.6	10	310	M	M	3		14	310
26	93	61	77	8	0	12	0.00	0.0	0	5.1	13	310	M	M	2		15	310
27	103	68	86	17	0	21	0.00	0.0	0	5.0	12	290	M	M	1		15	350
28	106	74	90	21	0	25	0.00	0.0	0	5.1	13	330	M	M	1		17	340
29	106	71	89	20	0	24	0.00	0.0	0	6.1	15	90	M	M	1		18	100
30	96	67	82	13	0	17	0.00	0.0	0	5.0	12	320	M	M	1		15	330

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31 94 62 78 9 0 13 0.00 0.0 0 5.8 15 320 M M 4 18 320
=====
SM 2683 1878 7 281 0.34 0.0 186.1 M 118
=====
AV 86.5 60.6 6.0 FASTST M M 4 MAX(MPH)
MISC ----> # 21 320 # 43 90
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: JULY
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 73.6	TOTAL FOR MONTH: 0.34	1 = FOG OR MIST
DPTR FM NORMAL: 5.5	DPTR FM NORMAL: -0.38	2 = FOG REDUCING VISIBILITY
HIGHEST: 106 ON 29,28	GRTST 24HR 0.34 ON 12-13	TO 1/4 MILE OR LESS
LOWEST: 55 ON 1		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 2	
MAX 90 OR ABOVE: 14	0.10 INCH OR MORE: 1	
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 0	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 0	
[HDD (BASE 65)]		
TOTAL THIS MO. 7	CLEAR (SCALE 0-3) 14	
DPTR FM NORMAL -14	PTCLDY (SCALE 4-7) 13	
TOTAL FM JUL 1 7	CLOUDY (SCALE 8-10) 4	
DPTR FM NORMAL -14		
[CDD (BASE 65)]		
TOTAL THIS MO. 281		
DPTR FM NORMAL 148	[PRESSURE DATA]	
TOTAL FM JAN 1 371	HIGHEST SLP 30.25 ON 13	
DPTR FM NORMAL 180	LOWEST SLP 29.67 ON 29	
[REMARKS]		
#FINAL-07-09#		

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011230

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: AUGUST

YEAR: 2009

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:		SNOW:		WIND			:SUNSHINE:			SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
										12Z	AVG	MX	2MIN					
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	95	63	79	10	0	14	0.00	0.0	0	6.1	16	320	M	M	5		20	320
2	94	65	80	11	0	15	0.00	0.0	0	5.5	10	310	M	M	7		15	330
3	91	60	76	7	0	11	0.00	0.0	0	6.0	16	320	M	M	2	8	23	230
4	85	59	72	3	0	7	0.00	0.0	0	4.5	10	330	M	M	1		M	M
5	78	58	68	-1	0	3	0.00	0.0	0	5.8	13	320	M	M	5		18	330
6	68	60	64	-5	1	0	0.00	0.0	0	6.0	10	160	M	M	10		14	150
7	69	62	66	-3	0	1	0.00	0.0	0	3.2	10	350	M	M	10		13	330
8	74	61	68	-1	0	3	0.00	0.0	0	2.6	10	280	M	M	10		M	99
9	80	62	71	2	0	6	0.00	0.0	0	4.8	16	320	M	M	7		21	320
10	85	55	70	1	0	5	0.00	0.0	0	4.4	14	280	M	M	5		18	280
11	75	64	70	1	0	5	0.39	0.0	0	5.4	14	320	M	M	9	1	16	320
12	79	61	70	1	0	5	0.30	0.0	0	7.4	16	320	M	M	9	1	23	320
13	70	55	63	-6	2	0	T	0.0	0	5.4	16	320	M	M	7		M	M
14	68	56	62	-7	3	0	0.01	0.0	0	4.6	13	310	M	M	8		18	10
15	67	57	62	-7	3	0	0.00	0.0	0	5.8	12	330	M	M	9		15	320
16	78	57	68	-1	0	3	0.00	0.0	0	7.1	14	310	M	M	5		21	320
17	90	59	75	6	0	10	0.00	0.0	0	6.1	15	320	M	M	5		20	330
18	92	62	77	8	0	12	0.00	0.0	0	4.7	15	320	M	M	2		20	320
19	97	63	80	11	0	15	0.00	0.0	0	3.2	8	300	M	M	4		10	310
20	86	62	74	6	0	9	0.00	0.0	0	6.0	15	330	M	M	2		20	320
21	75	63	69	1	0	4	T	0.0	0	4.9	15	310	M	M	7		21	330
22	79	60	70	2	0	5	0.00	0.0	0	9.5	22	310	M	M	5		24	310
23	74	53	64	-4	1	0	0.00	0.0	0	6.9	15	290	M	M	3		22	320
24	81	54	68	0	0	3	0.00	0.0	0	3.0	10	320	M	M	2		13	320
25	72	55	64	-4	1	0	0.05	0.0	0	3.5	12	170	M	M	6	1	13	300
26	85	52	69	1	0	4	0.00	0.0	0	2.3	8	280	M	M	3		12	270
27	92	56	74	6	0	9	0.00	0.0	0	4.1	12	310	M	M	2		M	M
28	80	58	69	2	0	4	0.01	0.0	0	3.4	18	280	M	M	6		32	90
29	76	63	70	3	0	5	0.00	0.0	0	5.1	16	320	M	M	7		22	90
30	82	62	72	5	0	7	0.00	0.0	0	4.7	15	320	M	M	5		24	20

```

31 80 60 70 3 0 5 0.00 0.0 0 6.3 14 350 M M 5 18 350
=====
SM 2497 1837 11 170 0.76 0.0 158.3 M 173
=====
AV 80.5 59.3 5.1 FASTST M M 6 MAX(MPH)
MISC ----> # 22 310 # 32 90
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: AUGUST
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 69.9	TOTAL FOR MONTH: 0.76	1 = FOG OR MIST
DPTR FM NORMAL: 1.4	DPTR FM NORMAL: -0.17	2 = FOG REDUCING VISIBILITY
HIGHEST: 97 ON 19	GRTST 24HR 0.39 ON 11-11	TO 1/4 MILE OR LESS
LOWEST: 52 ON 26		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 5	
MAX 90 OR ABOVE: 7	0.10 INCH OR MORE: 2	
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 0	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 0	
[HDD (BASE 65)]		
TOTAL THIS MO. 11	CLEAR (SCALE 0-3) 7	
DPTR FM NORMAL -10	PTCLDY (SCALE 4-7) 18	
TOTAL FM JUL 1 18	CLOUDY (SCALE 8-10) 6	
DPTR FM NORMAL -24		
[CDD (BASE 65)]		
TOTAL THIS MO. 170		
DPTR FM NORMAL 25	[PRESSURE DATA]	
TOTAL FM JAN 1 541	HIGHEST SLP 30.24 ON 15	
DPTR FM NORMAL 205	LOWEST SLP 29.70 ON 19	
[REMARKS]		
#FINAL-08-09#		

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011230

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: SEPTEMBER

YEAR: 2009

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:						:PCPN:		SNOW:	WIND		:SUNSHINE:				SKY	:PK WND				
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18		
										12Z	AVG	MX	2MIN							
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR		
1	76	58	67	0	0	2	0.00	0.0	0	5.5	12	310	M	M	5	3	15	330		
2	85	56	71	4	0	6	0.09	0.0	0	3.3	13	230	M	M	4	3	15	230		
3	78	60	69	3	0	4	0.03	0.0	0	4.8	13	180	M	M	7	3	18	210		
4	78	59	69	3	0	4	T	0.0	0	4.2	13	300	M	M	8		17	230		
5	68	57	63	-3	2	0	0.75	0.0	0	6.2	12	170	M	M	9	1	16	100		
6	69	58	64	-2	1	0	0.17	0.0	0	11.4	28	220	M	M	7	1	36	220		
7	70	56	63	-3	2	0	0.01	0.0	0	3.3	10	200	M	M	7		14	50		
8	74	50	62	-4	3	0	0.00	0.0	0	3.0	10	280	M	M	6		14	280		
9	79	54	67	2	0	2	0.00	0.0	0	5.7	13	320	M	M	8		28	90		
10	82	60	71	6	0	6	0.00	0.0	0	5.9	14	330	M	M	5	8	20	310		
11	94	58	76	11	0	11	0.00	0.0	0	6.4	16	100	M	M	0	8	20	90		
12	88	59	74	9	0	9	0.00	0.0	0	4.0	9	280	M	M	1		13	300		
13	76	64	70	6	0	5	0.00	0.0	0	6.2	18	190	M	M	8		21	180		
14	78	60	69	5	0	4	T	0.0	0	4.7	16	220	M	M	7	18	20	230		
15	84	59	72	8	0	7	0.00	0.0	0	3.9	10	100	M	M	5		12	270		
16	76	61	69	5	0	4	0.08	0.0	0	5.0	16	250	M	M	8	1	22	30		
17	72	55	64	1	1	0	0.00	0.0	0	3.2	10	290	M	M	5	12	14	280		
18	86	52	69	6	0	4	0.00	0.0	0	2.2	12	350	M	M	2	18	26	260		
19	70	54	62	-1	3	0	0.20	0.0	0	6.0	18	320	M	M	7	1	25	320		
20	73	50	62	-1	3	0	0.00	0.0	0	4.7	13	310	M	M	2	8	16	320		
21	85	50	68	6	0	3	0.00	0.0	0	10.8	26	80	M	M	2	8	32	80		
22	92	54	73	11	0	8	0.00	0.0	0	5.5	15	130	M	M	2		20	110		
23	87	52	70	8	0	5	0.00	0.0	0	3.5	14	330	M	M	6		21	320		
24	71	57	64	3	1	0	0.00	0.0	0	7.1	15	320	M	M	5		21	320		
25	77	54	66	5	0	1	0.00	0.0	0	3.5	13	330	M	M	3		18	320		
26	74	52	63	2	2	0	0.00	0.0	0	5.6	15	300	M	M	2		20	310		
27	83	49	66	5	0	1	0.00	M	0	7.7	23	80	M	M	1		28	80		
28	68	48	58	-2	7	0	T	M	0	8.9	21	260	M	M	6		24	250		
29	61	50	56	-4	9	0	0.04	0.0	0	6.8	18	260	M	M	7		26	300		
30	62	46	54	-6	11	0	0.03	M	0	4.1	12	240	M	M	9		15	360		

```

=====
SM 2316 1652          45  86  1.40      0.0 163.1          M      154
=====
AV 77.2 55.1                      5.4 FASTST  M      M      5      MAX(MPH)
                                MISC ----> # 28 220                      # 36 220
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: SEPTEMBER
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 66.1	TOTAL FOR MONTH: 1.40	1 = FOG OR MIST
DPTR FM NORMAL: 2.5	DPTR FM NORMAL: -0.25	2 = FOG REDUCING VISIBILITY
HIGHEST: 94 ON 11	GRTST 24HR 1.18 ON 18-19	TO 1/4 MILE OR LESS
LOWEST: 46 ON 30		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 9	
MAX 90 OR ABOVE: 2	0.10 INCH OR MORE: 3	
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 1	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 0	
[HDD (BASE 65)]		
TOTAL THIS MO. 45	CLEAR (SCALE 0-3) 8	
DPTR FM NORMAL -33	PTCLDY (SCALE 4-7) 18	
TOTAL FM JUL 1 63	CLOUDY (SCALE 8-10) 4	
DPTR FM NORMAL -57		
[CDD (BASE 65)]		
TOTAL THIS MO. 86		
DPTR FM NORMAL 34	[PRESSURE DATA]	
TOTAL FM JAN 1 627	HIGHEST SLP 30.38 ON 20	
DPTR FM NORMAL 239	LOWEST SLP 29.60 ON 13	

[REMARKS]

#FINAL-09-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 121731

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: OCTOBER

YEAR: 2009

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:						:PCPN:		SNOW:	WIND			:SUNSHINE:			SKY	:PK WND		
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
										12Z	AVG	MX	2MIN					
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	66	52	59	0	6	0	0.03	0.0	0	3.7	12	320	M	M	8	1	23	200
2	63	48	56	-3	9	0	T	M	0	7.1	20	310	M	M	5		23	300
3	60	42	51	-7	14	0	0.03	M	0	3.6	17	50	M	M	6		22	50
4	67	47	57	-1	8	0	0.04	M	0	3.7	10	300	M	M	6		20	90
5	66	41	54	-4	11	0	0.00	M	0	4.9	10	130	M	M	3	128	13	320
6	69	40	55	-2	10	0	0.00	M	0	1.6	8	330	M	M	1	12	20	330
7	68	47	58	1	7	0	0.00	0.0	0	4.7	12	310	M	M	7		15	320
8	70	43	57	0	8	0	0.00	M	0	2.1	8	330	M	M	4	12	21	70
9	66	46	56	0	9	0	0.00	M	0	4.2	12	110	M	M	4	1	20	310
10	63	44	54	-2	11	0	0.00	M	0	10.6	22	90	M	M	5	8	28	100
11	57	39	48	-8	17	0	0.00	M	0	12.6	25	80	M	M	6	8	29	90
12	59	48	54	-2	11	0	0.00	0.0	0	17.8	31	100	M	M	9		38	100
13	54	42	48	-7	17	0	0.08	M	0	21.6	35	90	M	M	9	17	44	100
14	67	46	57	2	8	0	0.15	M	0	13.8	25	220	M	M	8	1	32	220
15	63	53	58	3	7	0	T	0.0	0	6.2	14	120	M	M	9		17	110
16	71	58	65	11	0	0	0.01	0.0	0	8.7	23	110	M	M	8		29	120
17	66	57	62	8	3	0	0.37	0.0	0	9.4	18	110	M	M	8	138	24	110
18	65	53	59	5	6	0	0.01	0.0	0	3.5	15	190	M	M	9	1	20	190
19	64	51	58	5	7	0	0.18	0.0	0	2.4	10	300	M	M	8	1	24	20
20	61	51	56	3	9	0	0.00	0.0	0	2.4	9	320	M	M	9	1	17	270
21	64	52	58	5	7	0	0.38	0.0	0	5.7	16	190	M	M	8	1	20	190
22	57	47	52	0	13	0	T	M	0	2.2	9	110	M	M	9	12	16	290
23	62	48	55	3	10	0	0.42	M	0	8.9	25	210	M	M	9	1	31	220
24	60	43	52	0	13	0	0.00	M	0	2.7	10	310	M	M	5	1	14	340
25	56	41	49	-2	16	0	0.01	M	0	4.3	13	120	M	M	8	12	15	110
26	60	45	53	2	12	0	0.81	M	0	9.7	24	200	M	M	9	13	38	360
27	55	42	49	-2	16	0	0.05	M	0	7.1	17	300	M	M	6		21	290
28	52	41	47	-4	18	0	0.03	M	0	2.3	9	110	M	M	9	1	16	150
29	57	44	51	1	14	0	0.27	M	0	7.3	18	110	M	M	10	1	22	110
30	63	57	60	10	5	0	0.07	0.0	0	9.8	24	200	M	M	10		33	190

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31 61 49 55 5 10 0 0.08 M 0 5.5 21 190 M M 8 1 28 190
=====
SM 1932 1457 312 0 3.02 0.0 210.1 M 223
=====
AV 62.3 47.0 6.8 FASTST M M 7 MAX(MPH)
MISC ----> # 35 90 # 44 100
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: OCTOBER
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 54.7	TOTAL FOR MONTH: 3.02	1 = FOG OR MIST
DPTR FM NORMAL: 0.4	DPTR FM NORMAL: 0.14	2 = FOG REDUCING VISIBILITY
HIGHEST: 71 ON 16	GRTST 24HR 0.83 ON 26-27	TO 1/4 MILE OR LESS
LOWEST: 39 ON 11		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 18	
MAX 90 OR ABOVE: 0	0.10 INCH OR MORE: 7	
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 1	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 0	
[HDD (BASE 65)]		
TOTAL THIS MO. 312	CLEAR (SCALE 0-3) 2	
DPTR FM NORMAL -7	PTCLDY (SCALE 4-7) 15	
TOTAL FM JUL 1 375	CLOUDY (SCALE 8-10) 14	
DPTR FM NORMAL -64		
[CDD (BASE 65)]		
TOTAL THIS MO. 0		
DPTR FM NORMAL -2	[PRESSURE DATA]	
TOTAL FM JAN 1 627	HIGHEST SLP 30.37 ON 1	
DPTR FM NORMAL 237	LOWEST SLP 29.13 ON 13	
[REMARKS]		
#FINAL-10-09#		

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011230

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: NOVEMBER

YEAR: 2009

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE:				SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18	
12Z AVG MX 2MIN																			
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR	
1	56	38	47	-2	18	0	0.00	0.0	0	2.8	9	320	M	M	5	12	12	350	
2	58	38	48	-1	17	0	0.00	M	0	1.8	10	20	M	M	7	12	12	20	
3	60	35	48	-1	17	0	0.00	M	0	8.1	24	90	M	M	6	128	32	100	
4	62	46	54	5	11	0	0.00	0.0	0	8.9	21	120	M	M	6		28	120	
5	62	49	56	8	9	0	0.25	M	0	12.8	28	220	M	M	9	1	37	220	
6	57	47	52	4	13	0	0.35	M	0	10.1	20	200	M	M	8	18	29	210	
7	55	42	49	1	16	0	1.07	M	0	10.0	23	250	M	M	9	13	30	200	
8	53	45	49	1	16	0	0.14	M	0	9.8	17	110	M	M	8	1	22	110	
9	54	46	50	3	15	0	0.14	M	0	12.3	22	110	M	M	8	1	28	120	
10	58	41	50	3	15	0	0.13	M	0	7.5	17	210	M	M	7	13	22	210	
11	51	42	47	0	18	0	0.11	M	0	2.7	18	220	M	M	9	18	24	270	
12	48	41	45	-2	20	0	0.14	M	0	7.1	17	170	M	M	10	1	25	160	
13	47	39	43	-3	22	0	0.15	M	0	6.4	21	300	M	M	9	1	26	280	
14	48	36	42	-4	23	0	T	M	0	6.2	16	120	M	M	8		20	120	
15	48	42	45	-1	20	0	0.04	M	0	10.5	20	120	M	M	10		23	130	
16	64	47	56	10	9	0	0.03	M	0	15.4	32	200	M	M	10		45	200	
17	60	43	52	7	13	0	0.39	M	0	10.2	26	210	M	M	8	1	35	210	
18	52	41	47	2	18	0	0.03	M	0	12.8	25	170	M	M	8		37	160	
19	57	45	51	6	14	0	0.20	M	M	12.6	20	110	M	M	10		24	120	
20	55	41	48	3	17	0	0.33	M	0	8.0	18	110	M	M	10	1	22	200	
21	51	40	46	2	19	0	0.31	M	0	10.6	25	190	M	M	9	1	32	200	
22	51	40	46	2	19	0	0.23	M	0	11.9	38	200	M	M	7	1	51	210	
23	53	40	47	3	18	0	0.00	M	0	5.2	13	110	M	M	9	8	15	100	
24	57	39	48	4	17	0	T	M	0	4.5	12	290	M	M	7	1	14	280	
25	56	37	47	3	18	0	0.00	0.0	0	5.7	15	110	M	M	6	1	18	100	
26	49	42	46	3	19	0	0.86	M	0	4.6	13	120	M	M	10	1	16	120	
27	52	37	45	2	20	0	0.22	M	0	7.8	24	310	M	M	6	1	29	300	
28	50	40	45	2	20	0	0.00	0.0	0	1.1	8	180	M	M	9		25	160	
29	52	39	46	3	19	0	0.00	0.0	0	2.0	9	110	M	M	8	1	13	250	
30	46	43	45	3	20	0	0.01	M	0	3.9	8	110	M	M	10	18	8	100	

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=====
SM 1622 1241      510   0  5.13      0.0 233.3      M      246
=====
AV 54.1 41.4      7.8 FASTST  M      M      8      MAX(MPH)
                        MISC ----> # 38 200      # 51 210
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
 MONTH: NOVEMBER
 YEAR: 2009
 LATITUDE: 45 35 N
 LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 47.7	TOTAL FOR MONTH: 5.13	1 = FOG OR MIST
DPTR FM NORMAL: 1.9	DPTR FM NORMAL: -0.48	2 = FOG REDUCING VISIBILITY
HIGHEST: 64 ON 16	GRTST 24HR 1.16 ON 6- 7	TO 1/4 MILE OR LESS
LOWEST: 35 ON 3		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 20	
MAX 90 OR ABOVE: 0	0.10 INCH OR MORE: 16	
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 2	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 1	
[HDD (BASE 65)]		
TOTAL THIS MO. 510	CLEAR (SCALE 0-3) 0	
DPTR FM NORMAL -50	PTCLDY (SCALE 4-7) 13	
TOTAL FM JUL 1 885	CLOUDY (SCALE 8-10) 17	
DPTR FM NORMAL -114		

[CDD (BASE 65)]	
TOTAL THIS MO. 0	
DPTR FM NORMAL 0	[PRESSURE DATA]
TOTAL FM JAN 1 627	HIGHEST SLP 30.46 ON 28
DPTR FM NORMAL 237	LOWEST SLP 29.39 ON 22

[REMARKS]

#FINAL-11-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011231

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: DECEMBER

YEAR: 2009

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:						:PCPN:		SNOW:		WIND		:SUNSHINE:				SKY		:PK WND		
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18		
										12Z	AVG	MX	2MIN							
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR		
=====																				
1	53	42	48	6	17	0	0.00	M	0	8.8	22	90	M	M	5	18	29	90		
2	51	31	41	-1	24	0	0.00	M	0	10.8	26	100	M	M	0	8	33	100		
3	47	35	41	-1	24	0	0.00	0.0	0	11.5	18	110	M	M	5	8	23	110		
4	43	25	34	-8	31	0	T	M	0	1.5	10	310	M	M	5	18	12	310		
5	44	27	36	-6	29	0	0.00	M	0	3.7	22	80	M	M	7	12	28	80		
6	39	28	34	-7	31	0	0.00	M	0	19.6	37	80	M	M	6		43	70		
7	31	23	27	-14	38	0	0.00	0.0	0	19.4	30	100	M	M	1		38	100		
8	32	14	23	-18	42	0	0.00	M	0	9.5	22	80	M	M	1		25	80		
9	30	12	21	-20	44	0	0.00	M	0	1.6	7	140	M	M	1		18	20		
10	34	13	24	-17	41	0	0.00	M	0	1.2	5	240	M	M	1	18	8	10		
11	34	14	24	-17	41	0	0.00	M	0	2.8	8	110	M	M	4	128	9	120		
12	34	30	32	-8	33	0	0.01	M	0	3.3	8	130	M	M	10	16	9	130		
13	41	25	33	-7	32	0	T	M	0	7.0	20	200	M	M	7	18	28	210		
14	44	36	40	0	25	0	0.51	M	0	11.1	23	110	M	M	10	1	29	110		
15	40	35	38	-2	27	0	1.08	M	0	14.6	26	120	M	M	10	1	32	110		
16	51	38	45	5	20	0	0.54	M	0	10.7	18	100	M	M	8	1	21	100		
17	46	37	42	2	23	0	0.06	M	0	6.1	14	110	M	M	8	12	17	120		
18	50	34	42	2	23	0	T	M	0	5.2	15	110	M	M	8	12	18	120		
19	46	42	44	4	21	0	0.06	M	0	8.0	15	110	M	M	10	1	17	110		
20	48	44	46	6	19	0	0.14	M	0	13.6	22	110	M	M	10	1	25	110		
21	52	38	45	5	20	0	0.30	M	0	8.6	21	320	M	M	9	1	25	310		
22	42	29	36	-3	29	0	T	M	0	2.3	10	310	M	M	4	1	13	310		
23	35	29	32	-7	33	0	0.00	0.0	0	1.6	7	310	M	M	10	12	13	220		
24	38	28	33	-6	32	0	0.00	0.0	0	2.6	8	290	M	M	9	12	9	280		
25	42	24	33	-6	32	0	0.00	M	0	12.5	29	110	M	M	1	12	37	100		
26	42	34	38	-1	27	0	0.00	0.0	0	24.5	36	90	M	M	1		45	80		
27	41	32	37	-2	28	0	T	M	0	14.4	23	100	M	M	9		29	100		
28	43	27	35	-4	30	0	0.00	M	0	7.1	16	120	M	M	4		20	120		
29	38	26	32	-7	33	0	0.16	M	M	7.8	22	110	M	M	7	1	28	120		
30	38	32	35	-4	30	0	0.05	M	0	8.2	16	120	M	M	10	1	18	110		

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31 42 34 38 -1 27 0 0.85 M 0 11.6 22 110 M M 10 1 26 110
=====
SM 1291 918 906 0 3.76 0.0 271.2 M 191
=====
AV 41.6 29.6 8.7 FASTST M M 6 MAX(MPH)
MISC ----> # 37 80 # 45 80
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: DECEMBER
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]

AVERAGE MONTHLY: 35.6
DPTR FM NORMAL: -4.6
HIGHEST: 53 ON 1
LOWEST: 12 ON 9

[PRECIPITATION DATA]

TOTAL FOR MONTH: 3.76
DPTR FM NORMAL: -1.95
GRTST 24HR 1.24 ON 14-15
SNOW, ICE PELLETS, HAIL
TOTAL MONTH: 0.0 INCH
GRTST 24HR 0.0
GRTST DEPTH: 0

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST
2 = FOG REDUCING VISIBILITY
TO 1/4 MILE OR LESS
3 = THUNDER
4 = ICE PELLETS
5 = HAIL
6 = FREEZING RAIN OR DRIZZLE
7 = DUSTSTORM OR SANDSTORM:
VSBY 1/2 MILE OR LESS
8 = SMOKE OR HAZE
9 = BLOWING SNOW
X = TORNADO

[NO. OF DAYS WITH]

MAX 32 OR BELOW: 3
MAX 90 OR ABOVE: 0
MIN 32 OR BELOW: 19
MIN 0 OR BELOW: 0

[WEATHER - DAYS WITH]

0.01 INCH OR MORE: 11
0.10 INCH OR MORE: 7
0.50 INCH OR MORE: 4
1.00 INCH OR MORE: 1

[HDD (BASE 65)]

TOTAL THIS MO. 906
DPTR FM NORMAL 150
TOTAL FM JUL 1 1791
DPTR FM NORMAL 36

CLEAR (SCALE 0-3) 7
PTCLDY (SCALE 4-7) 12
CLOUDY (SCALE 8-10) 12

[CDD (BASE 65)]

TOTAL THIS MO. 0
DPTR FM NORMAL 0
TOTAL FM JAN 1 627
DPTR FM NORMAL 237

[PRESSURE DATA]

HIGHEST SLP 30.49 ON 23
LOWEST SLP 29.65 ON 12

[REMARKS]

#FINAL-12-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011604

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: JANUARY

YEAR: 2010

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE:				SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18	
12Z AVG MX 2MIN																			
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR	
1	53	40	47	8	18	0	0.65	M	0	12.9	21	190	M	M	9	1	28	200	
2	53	41	47	8	18	0	T	M	0	8.3	16	190	M	M	8		21	210	
3	46	40	43	4	22	0	0.00	0.0	0	3.4	15	110	M	M	10		20	110	
4	45	41	43	4	22	0	0.41	M	0	11.3	21	110	M	M	10	1	28	110	
5	47	42	45	6	20	0	0.28	M	0	10.3	18	110	M	M	10	1	23	110	
6	46	41	44	5	21	0	0.03	M	0	21.7	31	100	M	M	9		40	100	
7	44	39	42	3	23	0	0.00	0.0	0	22.3	32	90	M	M	7		40	90	
8	42	37	40	1	25	0	0.48	M	0	12.8	24	110	M	M	10	1	32	110	
9	44	37	41	2	24	0	0.02	M	0	9.5	17	120	M	M	9	1	21	120	
10	46	35	41	2	24	0	T	M	0	12.4	21	120	M	M	8		26	110	
11	46	40	43	3	22	0	0.04	M	0	12.9	22	110	M	M	10		28	110	
12	47	40	44	4	21	0	0.32	M	0	10.8	23	120	M	M	9	1	28	110	
13	51	42	47	7	18	0	0.18	M	0	14.1	29	180	M	M	8	1	38	170	
14	52	40	46	6	19	0	0.00	0.0	0	9.7	21	110	M	M	9		25	100	
15	54	45	50	10	15	0	0.89	M	0	9.8	23	110	M	M	9	1	29	120	
16	49	45	47	7	18	0	0.17	M	0	9.9	17	120	M	M	10	1	23	110	
17	55	46	51	11	14	0	0.27	M	0	13.0	36	180	M	M	9	1	46	170	
18	57	40	49	9	16	0	T	M	0	13.8	36	180	M	M	9		51	160	
19	58	44	51	11	14	0	0.04	M	0	13.7	29	100	M	M	9		36	100	
20	51	40	46	6	19	0	0.02	M	0	8.9	29	100	M	M	9		33	100	
21	56	39	48	8	17	0	0.01	M	0	5.2	17	110	M	M	8		22	150	
22	48	40	44	4	21	0	0.22	M	0	3.3	12	180	M	M	10	1	13	200	
23	51	38	45	5	20	0	0.01	M	0	4.5	15	110	M	M	7		20	110	
24	45	39	42	2	23	0	0.48	M	0	13.7	23	120	M	M	9	1	28	120	
25	47	38	43	2	22	0	0.18	M	0	9.0	22	110	M	M	8	1	26	120	
26	51	38	45	4	20	0	0.14	M	0	3.2	9	110	M	M	9	12	10	110	
27	52	38	45	4	20	0	0.00	0.0	0	6.1	18	100	M	M	8	12	23	90	
28	55	45	50	9	15	0	0.00	0.0	0	13.2	22	100	M	M	10	8	25	100	
29	50	44	47	6	18	0	0.01	M	0	9.7	25	110	M	M	10		29	110	
30	46	41	44	3	21	0	0.08	M	0	3.5	12	110	M	M	10		14	110	

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31 52 39 46 5 19 0 0.01 M 0 2.4 8 100 M M 6 1 10 180
=====
SM 1539 1254 609 0 4.94 0.0 315.3 M 276
=====
AV 49.6 40.5 10.2 FASTST M M 9 MAX (MPH)
MISC ----> # 36 180 # 51 160
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: JANUARY
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]

AVERAGE MONTHLY: 45.0
DPTR FM NORMAL: 5.1
HIGHEST: 58 ON 19
LOWEST: 35 ON 10

[PRECIPITATION DATA]

TOTAL FOR MONTH: 4.94
DPTR FM NORMAL: -0.13
GRTST 24HR 1.09 ON 31- 1
SNOW, ICE PELLETS, HAIL
TOTAL MONTH: 0.0 INCH
GRTST 24HR 0.0
GRTST DEPTH: 0

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST
2 = FOG REDUCING VISIBILITY
TO 1/4 MILE OR LESS
3 = THUNDER
4 = ICE PELLETS
5 = HAIL
6 = FREEZING RAIN OR DRIZZLE
7 = DUSTSTORM OR SANDSTORM:
VSBY 1/2 MILE OR LESS
8 = SMOKE OR HAZE
9 = BLOWING SNOW
X = TORNADO

[NO. OF DAYS WITH]

MAX 32 OR BELOW: 0
MAX 90 OR ABOVE: 0
MIN 32 OR BELOW: 0
MIN 0 OR BELOW: 0

[WEATHER - DAYS WITH]

0.01 INCH OR MORE: 23
0.10 INCH OR MORE: 13
0.50 INCH OR MORE: 2
1.00 INCH OR MORE: 0

[HDD (BASE 65)]

TOTAL THIS MO. 609
DPTR FM NORMAL -156
TOTAL FM JUL 1 2400
DPTR FM NORMAL -120

CLEAR (SCALE 0-3) 0
PTCLDY (SCALE 4-7) 6
CLOUDY (SCALE 8-10) 25

[CDD (BASE 65)]

TOTAL THIS MO. 0
DPTR FM NORMAL 0
TOTAL FM JAN 1 0
DPTR FM NORMAL 0

[PRESSURE DATA]

HIGHEST SLP 30.32 ON 2
LOWEST SLP 28.93 ON 20

[REMARKS]

#FINAL-01-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 210226

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: FEBRUARY

YEAR: 2010

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE: SKY				:PK WND		
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
										12Z	AVG	MX	2MIN					
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	45	36	41	0	24	0	0.19	M	0	5.9	15	110	M	M	10	1	18	110
2	53	39	46	5	19	0	0.01	M	0	5.4	20	110	M	M	8	1	22	110
3	48	41	45	3	20	0	0.14	M	0	11.8	21	110	M	M	9	1	23	110
4	51	43	47	5	18	0	0.15	M	0	15.2	30	80	M	M	10	1	36	80
5	55	43	49	7	16	0	0.06	M	0	11.2	24	110	M	M	8	1	28	110
6	53	41	47	5	18	0	0.01	M	0	5.5	16	110	M	M	9		21	110
7	54	38	46	4	19	0	0.00	0.0	0	2.5	8	110	M	M	8		8	110
8	51	32	42	0	23	0	0.00	0.0	0	3.1	10	300	M	M	6	1	12	300
9	56	35	46	4	19	0	0.00	M	0	4.2	12	180	M	M	5	12	14	170
10	43	35	39	-3	26	0	0.21	M	0	10.1	18	110	M	M	9	1	22	110
11	52	42	47	4	18	0	0.21	M	0	12.5	22	120	M	M	10	1	26	200
12	56	41	49	6	16	0	0.18	M	0	10.5	28	170	M	M	8	1	36	170
13	52	45	49	6	16	0	0.02	M	0	14.0	21	120	M	M	9		24	110
14	56	44	50	7	15	0	0.35	M	0	6.0	20	120	M	M	9	12	23	120
15	55	41	48	5	17	0	0.12	M	0	7.1	23	100	M	M	9	12	26	110
16	59	41	50	7	15	0	0.03	M	0	6.7	20	110	M	M	7	1	22	20
17	59	37	48	5	17	0	0.00	0.0	0	5.4	21	80	M	M	4	1	30	80
18	60	42	51	7	14	0	0.00	0.0	0	13.0	25	80	M	M	2		31	80
19	59	36	48	4	17	0	0.00	M	0	8.8	23	80	M	M	2		29	80
20	58	31	45	1	20	0	0.00	M	0	5.9	24	90	M	M	2	8	29	90
21	56	30	43	-1	22	0	0.00	M	0	6.2	18	80	M	M	0		22	70
22	55	27	41	-3	24	0	0.00	M	0	4.4	13	110	M	M	4		15	100
23	47	36	42	-2	23	0	0.33	M	0	4.4	13	120	M	M	9	1	16	110
24	56	41	49	5	16	0	0.11	M	0	7.6	20	220	M	M	9	1	23	200
25	56	42	49	4	16	0	0.06	M	0	7.5	18	100	M	M	7		22	120
26	54	47	51	6	14	0	0.58	M	0	9.3	26	180	M	M	10	1	36	170
27	58	44	51	6	14	0	T	M	0	6.9	14	180	M	M	6		17	180
28	59	42	51	6	14	0	0.00	M	0	1.3	6	290	M	M	7	1	22	330
SM	1516	1092			510	0	2.76		0.0	212.4			M		196			

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=====
AV 54.1 39.0                                7.6 FASTST  M    M    7    MAX (MPH)
                                           MISC ----> # 30 80                # 36 80
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: FEBRUARY
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 46.6	TOTAL FOR MONTH: 2.76	1 = FOG OR MIST
DPTR FM NORMAL: 3.5	DPTR FM NORMAL: -1.42	2 = FOG REDUCING VISIBILITY
HIGHEST: 60 ON 18	GRTST 24HR 0.64 ON 25-26	TO 1/4 MILE OR LESS
LOWEST: 27 ON 22		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 17	
MAX 90 OR ABOVE: 0	0.10 INCH OR MORE: 11	
MIN 32 OR BELOW: 4	0.50 INCH OR MORE: 1	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 0	
[HDD (BASE 65)]		
TOTAL THIS MO. 510	CLEAR (SCALE 0-3) 4	
DPTR FM NORMAL -95	PTCLDY (SCALE 4-7) 10	
TOTAL FM JUL 1 2910	CLOUDY (SCALE 8-10) 14	
DPTR FM NORMAL -215		
[CDD (BASE 65)]		
TOTAL THIS MO. 0		
DPTR FM NORMAL 0	[PRESSURE DATA]	
TOTAL FM JAN 1 0	HIGHEST SLP 30.25 ON 17	
DPTR FM NORMAL 0	LOWEST SLP 29.46 ON 26	

[REMARKS]

#FINAL-02-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011230

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: MARCH

YEAR: 2010

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:		SNOW:		WIND			:SUNSHINE:			SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
										12Z	AVG	MX	2MIN					
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR
1	59	41	50	5	15	0	0.00	M	0	2.9	15	110	M	M	10	1	17	130
2	54	41	48	3	17	0	0.02	M	0	4.9	17	190	M	M	9	1	23	190
3	54	40	47	2	18	0	T	M	0	2.1	7	210	M	M	9	12	9	200
4	55	37	46	0	19	0	0.00	M	0	2.1	10	100	M	M	6	1	13	110
5	58	39	49	3	16	0	0.00	M	0	3.2	12	290	M	M	7	8	17	280
6	66	36	51	5	14	0	0.00	M	0	2.8	10	100	M	M	3		12	100
7	56	38	47	1	18	0	0.06	M	0	6.1	16	190	M	M	6		20	190
8	51	37	44	-2	21	0	0.02	M	0	9.9	33	320	M	M	6	5	40	320
9	49	34	42	-4	23	0	0.11	M	0	7.7	18	210	M	M	9	1	24	190
10	50	38	44	-2	21	0	0.07	M	0	6.7	15	110	M	M	8		18	110
11	51	41	46	-1	19	0	0.64	M	0	11.5	23	190	M	M	10	1	29	190
12	50	39	45	-2	20	0	0.20	M	0	11.0	21	220	M	M	10	18	25	170
13	51	38	45	-2	20	0	T	M	0	9.0	18	200	M	M	8		24	200
14	58	33	46	-1	19	0	0.00	M	0	4.5	14	120	M	M	7	1	16	120
15	64	43	54	7	11	0	T	M	0	7.6	21	110	M	M	9	8	23	100
16	60	47	54	7	11	0	0.01	M	0	10.6	22	240	M	M	8		29	230
17	56	41	49	2	16	0	T	M	0	6.2	18	320	M	M	6	8	23	310
18	61	30	46	-2	19	0	0.00	M	0	5.7	14	320	M	M	2		18	320
19	65	34	50	2	15	0	0.00	M	0	12.2	26	80	M	M	1		32	70
20	70	45	58	10	7	0	T	M	0	11.5	22	110	M	M	6		25	120
21	58	47	53	5	12	0	0.06	M	0	9.5	25	250	M	M	9	18	31	250
22	55	43	49	1	16	0	0.03	M	0	3.8	13	250	M	M	8		15	250
23	62	37	50	2	15	0	0.00	0.0	0	3.8	13	290	M	M	5	1	15	310
24	68	41	55	7	10	0	0.11	M	0	6.4	31	200	M	M	6		37	200
25	54	45	50	2	15	0	0.21	M	0	14.3	30	190	M	M	10		40	200
26	56	42	49	1	16	0	0.29	M	0	8.2	21	230	M	M	7	1	26	230
27	64	37	51	2	14	0	0.00	M	0	6.3	16	110	M	M	8	1	21	110
28	56	47	52	3	13	0	0.68	M	0	10.5	22	180	M	M	10	1	29	200
29	52	40	46	-3	19	0	0.87	M	0	14.0	32	200	M	M	9	1	44	190
30	47	39	43	-6	22	0	0.06	M	0	10.4	18	200	M	M	10	1	25	150

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31 52 39 46 -3 19 0 0.14 M 0 5.7 14 310 M M 9 1 20 260
=====
SM 1762 1229 510 0 3.58 0.0 231.1 M 231
=====
AV 56.8 39.6 7.5 FASTST M M 7 MAX(MPH)
MISC ----> # 33 320 # 44 190
=====

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NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: MARCH
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]

AVERAGE MONTHLY: 48.2
DPTR FM NORMAL: 1.0
HIGHEST: 70 ON 20
LOWEST: 30 ON 18

[PRECIPITATION DATA]

TOTAL FOR MONTH: 3.58
DPTR FM NORMAL: -0.13
GRTST 24HR 0.87 ON 29-29
SNOW, ICE PELLETS, HAIL
TOTAL MONTH: 0.0 INCH
GRTST 24HR 0.0
GRTST DEPTH: 0

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST
2 = FOG REDUCING VISIBILITY
TO 1/4 MILE OR LESS
3 = THUNDER
4 = ICE PELLETS
5 = HAIL
6 = FREEZING RAIN OR DRIZZLE
7 = DUSTSTORM OR SANDSTORM:
VSBY 1/2 MILE OR LESS
8 = SMOKE OR HAZE
9 = BLOWING SNOW
X = TORNADO

[NO. OF DAYS WITH]

MAX 32 OR BELOW: 0
MAX 90 OR ABOVE: 0
MIN 32 OR BELOW: 1
MIN 0 OR BELOW: 0

[WEATHER - DAYS WITH]

0.01 INCH OR MORE: 17
0.10 INCH OR MORE: 9
0.50 INCH OR MORE: 3
1.00 INCH OR MORE: 0

[HDD (BASE 65)]

TOTAL THIS MO. 510
DPTR FM NORMAL -26
TOTAL FM JUL 1 3420
DPTR FM NORMAL -241

CLEAR (SCALE 0-3) 3
PTCLDY (SCALE 4-7) 15
CLOUDY (SCALE 8-10) 13

[CDD (BASE 65)]

TOTAL THIS MO. 0
DPTR FM NORMAL 0
TOTAL FM JAN 1 0
DPTR FM NORMAL 0

[PRESSURE DATA]

HIGHEST SLP 30.57 ON 17
LOWEST SLP 29.46 ON 29

[REMARKS]

#FINAL-03-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011230

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: APRIL

YEAR: 2010

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE:			SKY		:PK WND			
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18		
										12Z	AVG	MX	2MIN							
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR		
1	54	38	46	-3	19	0	0.03	M	0	8.0	18	190	M	M	7		24	200		
2	52	40	46	-3	19	0	0.48	M	0	15.9	39	260	M	M	10	1	47	260		
3	49	38	44	-5	21	0	0.06	M	0	14.5	26	200	M	M	9	1	32	200		
4	53	40	47	-2	18	0	0.08	M	0	15.4	32	110	M	M	9	1	39	100		
5	51	36	44	-6	21	0	0.20	M	0	16.2	37	180	M	M	9		46	190		
6	55	42	49	-1	16	0	0.05	M	0	9.6	20	190	M	M	10	1	24	200		
7	54	43	49	-1	16	0	0.08	M	0	5.4	17	190	M	M	10	1	25	190		
8	50	38	44	-6	21	0	0.10	M	0	9.3	25	280	M	M	7	1	31	270		
9	54	39	47	-3	18	0	0.02	M	0	4.6	9	330	M	M	7		13	340		
10	61	34	48	-2	17	0	T	M	0	12.7	30	100	M	M	7		38	70		
11	65	46	56	6	9	0	0.02	M	0	5.2	15	300	M	M	9		18	250		
12	63	48	56	5	9	0	0.27	M	0	4.9	14	320	M	M	7	1	17	330		
13	61	43	52	1	13	0	0.05	M	0	4.7	13	350	M	M	7	1	18	350		
14	65	35	50	-1	15	0	0.13	M	0	6.8	26	170	M	M	6		31	170		
15	62	44	53	2	12	0	0.08	M	0	5.8	14	290	M	M	5	1	16	280		
16	69	44	57	6	8	0	0.00	M	0	3.7	12	280	M	M	6		22	260		
17	66	49	58	7	7	0	0.03	M	0	3.9	13	250	M	M	7	3	16	250		
18	73	45	59	8	6	0	0.00	M	0	2.8	8	300	M	M	9	12	10	280		
19	68	51	60	8	5	0	0.01	0.0	0	5.4	14	270	M	M	10		16	260		
20	57	48	53	1	12	0	0.01	M	0	9.9	23	310	M	M	9		30	310		
21	57	47	52	0	13	0	0.01	M	0	10.7	14	310	M	M	9		17	320		
22	62	43	53	1	12	0	0.00	0.0	0	6.4	14	320	M	M	5		18	300		
23	63	39	51	-1	14	0	0.06	M	0	3.1	22	300	M	M	8	1	26	290		
24	59	45	52	-1	13	0	0.04	M	0	7.7	21	250	M	M	8		25	250		
25	65	41	53	0	12	0	0.00	M	0	2.5	9	290	M	M	8		15	20		
26	63	50	57	4	8	0	0.40	0.0	0	12.6	24	180	M	M	10	1	33	190		
27	55	46	51	-2	14	0	0.32	M	0	10.5	18	160	M	M	9	158	32	230		
28	54	44	49	-4	16	0	0.22	M	0	8.2	21	240	M	M	8	13	23	240		
29	57	43	50	-4	15	0	0.13	M	0	6.4	20	300	M	M	8	15	24	300		
30	57	44	51	-3	14	0	0.04	M	0	5.0	16	300	M	M	9	1	18	290		

```

=====
SM 1774 1283      413    0  2.92      0.0 237.8      M      242
=====
AV 59.1 42.8      7.9 FASTST  M      M      8      MAX(MPH)
                        MISC ----> # 39 260      # 47 260
=====

```

NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: APRIL
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 51.0	TOTAL FOR MONTH: 2.92	1 = FOG OR MIST
DPTR FM NORMAL: -0.2	DPTR FM NORMAL: 0.28	2 = FOG REDUCING VISIBILITY
HIGHEST: 73 ON 18	GRTST 24HR 0.70 ON 26-27	TO 1/4 MILE OR LESS
LOWEST: 34 ON 10		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 25	
MAX 90 OR ABOVE: 0	0.10 INCH OR MORE: 9	
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 0	
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 0	
[HDD (BASE 65)]		
TOTAL THIS MO. 413	CLEAR (SCALE 0-3) 0	
DPTR FM NORMAL 13	PTCLDY (SCALE 4-7) 15	
TOTAL FM JUL 1 3833	CLOUDY (SCALE 8-10) 15	
DPTR FM NORMAL -228		

[CDD (BASE 65)]	
TOTAL THIS MO. 0	
DPTR FM NORMAL -1	[PRESSURE DATA]
TOTAL FM JAN 1 0	HIGHEST SLP 30.37 ON 25
DPTR FM NORMAL -1	LOWEST SLP 29.44 ON 26

[REMARKS]

#FINAL-04-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

000

CXUS55 KPQR 101621

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: MAY

YEAR: 2010

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE:				SKY		:PK WND		
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18		
										12Z	AVG	MX	2MIN							
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR		
1	61	48	55	1	10	0	0.01	0.0	0	10.4	20	320	M	M	9		25	320		
2	61	47	54	0	11	0	T	0.0	0	7.5	17	200	M	M	9		22	230		
3	54	42	48	-6	17	0	0.23	0.0	0	13.0	26	300	M	M	8 1		33	300		
4	50	41	46	-9	19	0	0.17	0.0	0	4.0	18	330	M	M	8 15		24	320		
5	53	41	47	-8	18	0	0.17	0.0	0	5.6	22	300	M	M	8 18		29	300		
6	59	41	50	-5	15	0	0.00	0.0	0	1.8	8	330	M	M	7		12	350		
7	68	42	55	0	10	0	T	0.0	0	5.6	24	120	M	M	7		30	130		
8	69	44	57	1	8	0	0.00	0.0	0	4.8	16	320	M	M	3		21	340		
9	71	42	57	1	8	0	0.04	0.0	0	5.6	21	320	M	M	4 8		25	320		
10	61	47	54	-2	11	0	0.13	0.0	0	7.2	18	310	M	M	8 1		24	320		
11	62	50	56	0	9	0	0.00	0.0	0	4.6	17	310	M	M	9		21	320		
12	65	48	57	1	8	0	0.00	0.0	0	7.2	14	310	M	M	8		17	340		
13	74	46	60	3	5	0	0.00	0.0	0	4.6	12	290	M	M	4		15	290		
14	76	49	63	6	2	0	0.00	0.0	0	5.0	14	310	M	M	3 8		16	320		
15	74	50	62	5	3	0	0.00	0.0	0	5.0	12	320	M	M	7	M	30			
16	74	52	63	6	2	0	0.03	0.0	0	1.9	10	100	M	M	8		13	100		
17	75	54	65	8	0	0	0.83	0.0	0	6.3	14	190	M	M	9 13		16	170		
18	64	52	58	0	7	0	0.05	0.0	0	8.7	20	200	M	M	9 18		26	200		
19	67	48	58	0	7	0	0.35	0.0	0	12.6	30	230	M	M	8 1		45	240		
20	56	44	50	-8	15	0	0.32	0.0	0	9.8	24	190	M	M	8 1358		31	180		
21	54	45	50	-8	15	0	0.25	0.0	0	6.6	23	250	M	M	10 13		28	250		
22	56	44	50	-8	15	0	0.20	0.0	0	6.4	16	300	M	M	9		20	300		
23	54	44	49	-9	16	0	0.25	0.0	0	5.6	20	110	M	M	9 158		22	110		
24	61	43	52	-7	13	0	T	0.0	0	7.1	14	160	M	M	9		18	170		
25	64	51	58	-1	7	0	0.38	0.0	0	4.2	20	80	M	M	10 13		26	90		
26	59	49	54	-5	11	0	0.58	0.0	0	4.5	17	200	M	M	6 1		22	200		
27	64	45	55	-4	10	0	0.01	0.0	0	4.4	15	320	M	M	8		20	320		
28	57	49	53	-6	12	0	0.38	0.0	0	6.6	16	270	M	M	9 1		20	260		
29	61	49	55	-5	10	0	0.06	0.0	0	5.5	12	210	M	M	9 1		13	180		
30	65	52	59	-1	6	0	0.12	0.0	0	2.9	10	300	M	M	10 1		13	300		

```

31  71  53  62   2   3   0 0.12  0.0   0  8.4 17 280   M   M   8 8       24 210
=====
SM 1960 1452       303   0  4.68       0.0 193.4       M       241
=====
AV 63.2 46.8              6.2 FASTST   M   M   8   MAX (MPH)
                                MISC ----> # 30 230                                # 45 240
=====

```

NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: MAY
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]

[PRECIPITATION DATA]

SYMBOLS USED IN COLUMN 16

AVERAGE MONTHLY: 55.0
DPTR FM NORMAL: -2.1
HIGHEST: 76 ON 14
LOWEST: 41 ON 6, 5

TOTAL FOR MONTH: 4.68
DPTR FM NORMAL: 2.30
GRTST 24HR 0.86 ON 17-18
SNOW, ICE PELLETS, HAIL
TOTAL MONTH: 0.0 INCH
GRTST 24HR 0.0
GRTST DEPTH: 0

1 = FOG OR MIST
2 = FOG REDUCING VISIBILITY
TO 1/4 MILE OR LESS
3 = THUNDER
4 = ICE PELLETS
5 = HAIL
6 = FREEZING RAIN OR DRIZZLE
7 = DUSTSTORM OR SANDSTORM:
VSBY 1/2 MILE OR LESS
8 = SMOKE OR HAZE
9 = BLOWING SNOW
X = TORNADO

[NO. OF DAYS WITH]

[WEATHER - DAYS WITH]

MAX 32 OR BELOW: 0
MAX 90 OR ABOVE: 0
MIN 32 OR BELOW: 0
MIN 0 OR BELOW: 0

0.01 INCH OR MORE: 21
0.10 INCH OR MORE: 15
0.50 INCH OR MORE: 2
1.00 INCH OR MORE: 0

[HDD (BASE 65)]

TOTAL THIS MO. 303
DPTR FM NORMAL 60
TOTAL FM JUL 1 4136
DPTR FM NORMAL -168

CLEAR (SCALE 0-3) 2
PTCLDY (SCALE 4-7) 12
CLOUDY (SCALE 8-10) 17

[CDD (BASE 65)]

TOTAL THIS MO. 0
DPTR FM NORMAL -14
TOTAL FM JAN 1 0
DPTR FM NORMAL -15

[PRESSURE DATA]

HIGHEST SLP 30.45 ON 4
LOWEST SLP 29.68 ON 19

[REMARKS]

#FINAL-05-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

WFO Monthly/Daily Climate Data

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CXUS55 KPQR 011740

CF6PDX

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: JUNE

YEAR: 2010

LATITUDE: 45 35 N

LONGITUDE: 122 36 W

TEMPERATURE IN F:					:PCPN:			SNOW:		WIND		:SUNSHINE:				SKY		:PK WND	
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18	
12Z AVG MX 2MIN																			
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	S-S	WX	SPD	DR	
1	63	53	58	-2	7	0	0.22	0.0	0	5.5	15	190	M	M	10	1	21	210	
2	65	52	59	-1	6	0	0.67	0.0	0	10.7	18	200	M	M	10	18	25	190	
3	62	46	54	-6	11	0	0.27	M	0	3.9	15	210	M	M	9	1	20	210	
4	63	50	57	-4	8	0	0.45	0.0	0	5.3	12	320	M	M	9	1	16	360	
5	74	47	61	0	4	0	0.00	M	0	4.2	10	280	M	M	6		14	290	
6	63	57	60	-1	5	0	1.48	0.0	0	2.1	9	330	M	M	10	1	14	320	
7	69	54	62	1	3	0	0.01	0.0	0	4.2	12	320	M	M	6	1	M	M	
8	71	50	61	0	4	0	0.14	0.0	0	4.6	17	230	M	M	7	1	22	220	
9	63	52	58	-3	7	0	0.27	0.0	0	9.3	23	200	M	M	7	18	29	210	
10	59	52	56	-6	9	0	0.32	0.0	0	6.5	16	280	M	M	10	1	21	280	
11	64	52	58	-4	7	0	0.00	0.0	0	4.6	13	310	M	M	8		16	320	
12	81	50	66	4	0	1	0.00	0.0	0	5.8	15	320	M	M	3	1	20	320	
13	72	51	62	0	3	0	0.00	0.0	0	8.7	21	310	M	M	2		23	320	
14	65	46	56	-6	9	0	0.00	0.0	0	6.3	17	320	M	M	7		22	330	
15	57	48	53	-10	12	0	0.38	M	0	4.5	14	260	M	M	8	1	18	260	
16	59	48	54	-9	11	0	0.03	M	0	3.5	8	100	M	M	10	1	10	190	
17	63	52	58	-5	7	0	0.00	0.0	0	5.4	12	310	M	M	9		14	350	
18	69	49	59	-4	6	0	T	M	0	4.6	13	310	M	M	7		17	280	
19	68	53	61	-2	4	0	0.01	0.0	0	4.2	13	320	M	M	9		18	320	
20	59	53	56	-7	9	0	0.02	0.0	0	2.5	16	220	M	M	10	1	25	260	
21	66	54	60	-4	5	0	0.00	0.0	0	3.2	9	320	M	M	9		14	250	
22	75	55	65	1	0	0	0.00	0.0	0	3.4	12	310	M	M	9		14	300	
23	83	60	72	8	0	7	0.00	0.0	0	5.1	13	280	M	M	6	8	16	330	
24	81	56	69	5	0	4	0.00	0.0	0	6.4	14	320	M	M	3	8	18	320	
25	73	56	65	0	0	0	0.00	0.0	0	6.4	13	320	M	M	7		17	330	
26	77	54	66	1	0	1	0.00	0.0	0	5.0	10	330	M	M	5	8	13	320	
27	82	54	68	3	0	3	0.00	0.0	0	5.2	14	310	M	M	3		17	310	
28	76	57	67	2	0	2	0.00	0.0	0	6.8	17	320	M	M	6	8	23	330	
29	70	52	61	-4	4	0	0.00	0.0	0	7.4	16	320	M	M	7		22	320	
30	71	50	61	-5	4	0	0.00	0.0	0	5.9	15	300	M	M	6		17	310	

```

=====
SM 2063 1563      145  18  4.27      0.0 161.2      M      218
=====
AV 68.8 52.1      5.4 FASTST  M      M      7      MAX(MPH)
                        MISC ----> # 23 200      # 29 210
=====

```

NOTES:

LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: PORTLAND OR
MONTH: JUNE
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 60.4	TOTAL FOR MONTH: 4.27	1 = FOG OR MIST
DPTR FM NORMAL: -2.3	DPTR FM NORMAL: 2.68	2 = FOG REDUCING VISIBILITY
HIGHEST: 83 ON 23	GRTST 24HR 1.48 ON 6- 6	TO 1/4 MILE OR LESS
LOWEST: 46 ON 14, 3		3 = THUNDER
	SNOW, ICE PELLETS, HAIL	4 = ICE PELLETS
	TOTAL MONTH: 0.0 INCH	5 = HAIL
	GRTST 24HR 0.0	6 = FREEZING RAIN OR DRIZZLE
	GRTST DEPTH: 0	7 = DUSTSTORM OR SANDSTORM:
		VSBY 1/2 MILE OR LESS
		8 = SMOKE OR HAZE
		9 = BLOWING SNOW
		X = TORNADO

[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]
MAX 32 OR BELOW: 0	0.01 INCH OR MORE: 13
MAX 90 OR ABOVE: 0	0.10 INCH OR MORE: 9
MIN 32 OR BELOW: 0	0.50 INCH OR MORE: 2
MIN 0 OR BELOW: 0	1.00 INCH OR MORE: 1

[HDD (BASE 65)]	
TOTAL THIS MO. 145	CLEAR (SCALE 0-3) 3
DPTR FM NORMAL 49	PTCLDY (SCALE 4-7) 15
TOTAL FM JUL 1 4281	CLOUDY (SCALE 8-10) 12
DPTR FM NORMAL -119	

[CDD (BASE 65)]		[PRESSURE DATA]
TOTAL THIS MO. 18		
DPTR FM NORMAL -25		
TOTAL FM JAN 1 18	HIGHEST SLP 30.39 ON 11	
DPTR FM NORMAL -40	LOWEST SLP 29.61 ON 4	

[REMARKS]

#FINAL-06-10#

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Tuesday, March 2, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: Zinc Lake / [none] *Convey on Log*

Enclosed are the results of analyses for work order A10B291, which was received by the laboratory on 2/26/2010 at 3:00:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 1 of 7

KMB00010121

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Zinc Lake

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/02/10 11:26

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Zinc/Conveyor Leg	A10B291-01	Water	02/26/10 08:45	02/26/10 15:00

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/02/10 11:26

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc/Conveyor Leg (A10B291-01)			Matrix: Water		Batch: 1003004			
Zinc	1310	---	20.0	ug/L	5	03/01/10 13:58	EPA 6020	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**
Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/02/10 11:26

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1003004 - EPA 3015A						Water						
Blank (1003004-BLK1)					Prepared: 03/01/10 08:33		Analyzed: 03/01/10 13:24					
EPA 6020												
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	
LCS (1003004-BS1)					Prepared: 03/01/10 08:33		Analyzed: 03/01/10 13:27					
EPA 6020												
Zinc	56.1	---	4.00	ug/L	1	55.6	---	101	80-120%	---	---	
LCS (1003004-BS2)					Prepared: 03/01/10 15:03		Analyzed: 03/01/10 17:07					
EPA 6020												
Zinc	55.6	---	4.00	ug/L	1	55.6	---	100	80-120%	---	---	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/02/10 11:26

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1003004							
A10B291-01	Water	EPA 6020	02/26/10 08:45	03/01/10 08:33	45mL/50mL	45mL/50mL	1.00

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 5 of 7

KMB00010125

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/02/10 11:26

Notes and Definitions

Qualifiers:

Notes and Conventions:

- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.
- RPD Relative Percent Difference
- MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.
- WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.
- Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.
- Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.
- For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.
- Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: Zinc Lake
Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/02/10 11:26

CHAIN OF CUSTODY RECORD

Page 1 of 1

Contact Person/Project Manager Jack Walker
Company KINDER MORGAN
Address 15550 N. LOMBARD
PORTLAND, OR 97203
Phone 503-285-4200 Fax
Project No. ZINC LAKE Project Name ZINC LAKE
Project Site Location OR 28 WA Other
Invoice To P.O. No.

APEX

~~Specialty Analytical~~

14771 SE Curry Blvd
Gresham, OR 97030
Phone: 503-667-1334
Fax: 503-607-1330



Collected By: [Signature]
Signature: [Signature]
Printed: NEIL MAULIK
Signature: [Signature]
Printed: KATRINA GREENE

Turn Around Time
☐ Normal: 5-7 Business Days
☒ Rush: 10/10 5 days
Specify

Rush Analytes Must Be Scheduled With This Lab In Advance

Date		Time	Sample ID	Matrix	No. of Containers	Analysis	Lab ID No.	Shipped Via	Lab Bill No.	Temperature On Receipt	Specialty Analytical Containers?	Specialty Analytical Trip Blanks?	Lab ID	Comments	Received By	Date	Time
2/24/10	0805		ZINC CONCENTRATIONS		1												
<p>Relinquished By: <u>[Signature]</u> Date: <u>10/26/10</u> Time: <u>15:00</u> Company: <u>KINDER MORGAN</u></p> <p>Relinquished By: <u>Ben Rading</u> Date: <u>10/26/10</u> Time: <u>15:00</u> Company: <u>APEX</u></p> <p>Unless Relinquished, Samples Will Be Discarded at 60 Days After Receipt Samples not beyond 60 days subject to storage fees!</p>																	

Green: White-Original Yellow-Project File Pink-Customer Copy

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Friday, March 5, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: Zinc Lake / [none]

Enclosed are the results of analyses for work order A10B252, which was received by the laboratory on 2/24/2010 at 1:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard
Portland, OR 97203

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 14:07

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Zinc Lake	A10B252-01	Water	02/24/10 12:05	02/24/10 13:40

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 14:07

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Lake (A10B252-01)			Matrix: Water		Batch: 1002416			
Zinc	551	---	4.00	ug/L	1	02/26/10 15:13	EPA 6020	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Zinc Lake

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 14:07

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Lake (A10B252-01)			Matrix: Water		Batch: 1003007			
Zinc	507	---	4.00	ug/L	1	03/01/10 14:43	EPA 6020 (Diss)	FILT

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: Zinc Lake

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 14:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002416 - EPA 3015A						Water						
Blank (1002416-BLK1)					Prepared: 02/25/10 14:19		Analyzed: 02/26/10 13:56					
EPA 6020												
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	
LCS (1002416-BS1)					Prepared: 02/25/10 14:19		Analyzed: 02/26/10 13:59					
EPA 6020												
Zinc	55.8	---	4.00	ug/L	1	55.6	---	100	80-120%	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**
Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 14:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1003007 - EPA 3015A - Dissolved						Water						
Blank (1003007-BLK1)						Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14:01						
EPA 6020 (Diss)												
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	
Blank (1003007-BLK2)						Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14:04						
EPA 6020 (Diss)												
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	
Blank (1003007-BLK3)						Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14:07						
EPA 6020 (Diss)												
Zinc	ND	---	4.00	ug/L	1	---	---	---	---	---	---	
LCS (1003007-BS1)						Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14:10						
EPA 6020 (Diss)												
Zinc	56.2	---	4.00	ug/L	1	55.6	---	101	80-120%	---	---	

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 14:07

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002416							
A10B252-01	Water	EPA 6020	02/24/10 12:05	02/25/10 14:19	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1003007							
A10B252-01	Water	EPA 6020 (Diss)	02/24/10 12:05	03/01/10 10:48	45mL/50mL	45mL/50mL	1.00

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **Zinc Lake**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
03/05/10 14:07

Notes and Definitions

Qualifiers:

FILT Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories



Allison Greiner For Darwin Thomas, Business Development Director

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Apex Labs

12232 S.W. Garden Place
Tigard, OR 97223
503-718-2323 Phone
503-718-0333 Fax

Saturday, February 13, 2010

Katrina Greene
Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

RE: General / [none]

Enclosed are the results of analyses for work order A10B113, which was received by the laboratory on 2/10/2010 at 5:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 1 of 9

KMB00010137

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: General

Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Zinc Impact Area	A10B113-01	Water	02/10/10 14:28	02/10/10 17:40

DRAFT REPORT

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Impact Area (A10B113-01)			Matrix: Water		Batch: 1002178			
Zinc	0.779	---	0.0200	mg/L	5	02/11/10 16:54	EPA 6020	

DRAFT REPORT

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Kinder Morgan Terminal 5
15550 N Lombard
Portland, OR 97203

Project: **General**
Project Number: [none]
Project Manager: Katrina Greene

Reported:
02/13/10 12:08

ANALYTICAL SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Impact Area (A10B113-01)			Matrix: Water	Batch: 1002210				
Zinc	0.713	---	0.0200	mg/L	5	02/12/10 17:22	EPA 6020 (Diss)	FILT

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Total Metals by EPA 6020 (ICPMS)

Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002178 - EPA 3015A						Water						
Blank (1002178-BLK1)					Prepared: 02/11/10 10:45		Analyzed: 02/11/10 16:20					
EPA 6020												
Zinc	ND	---	0.00400	mg/L	1	---	---	---	---	---	---	
LCS (1002178-BS1)					Prepared: 02/11/10 10:45		Analyzed: 02/11/10 16:22					
EPA 6020												
Zinc	0.0577	---	0.00400	mg/L	1	0.0556	---	104	80-120%	---	---	

DRAFT REPORT

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

QUALITY CONTROL (QC) SAMPLE RESULTS

DRAFT: Dissolved Metals by EPA 6020 (ICPMS)

Analytc	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002210 - EPA 3015A - Dissolved							Water					
Blank (1002210-BLK1)					Prepared: 02/12/10 11:48		Analyzed: 02/12/10 16:49					
EPA 6020 (Diss)												
Zinc	ND	---	0.00400	mg/L	1	---	---	---	---	---	---	
LCS (1002210-BS1)					Prepared: 02/12/10 11:48		Analyzed: 02/12/10 16:52					
EPA 6020 (Diss)												
Zinc	0.0565	---	0.00400	mg/L	1	0.0556	---	102	80-120%	---	---	

DRAFT REPORT

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
02/13/10 12:08

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002178							
A10B113-01	Water	EPA 6020	02/10/10 14:28	02/11/10 10:45	45mL/50mL	45mL/50mL	1.00

Dissolved Metals by EPA 6020 (ICPMS)

Prep: EPA 3015A - Dissolved

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002210							
A10B113-01	Water	EPA 6020 (Diss)	02/10/10 14:28	02/12/10 11:48	45mL/50mL	45mL/50mL	1.00

Prep: Lab Filtration

Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002182							
A10B113-01	Water	NA	02/10/10 14:28	02/11/10 11:20	50mL/50mL	1mL/1mL	NA

DRAFT REPORT

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Kinder Morgan Terminal 5

15550 N Lombard
Portland, OR 97203

Project: **General**

Project Number: [none]
Project Manager: Katrina Greene

Reported:
02/13/10 12:08

Notes and Definitions

Qualifiers:

FILT Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry' designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

DRAFT REPORT

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Reported:
02/13/10 12:08

APEX LABS

12232 S.W. Garden Place, Tigard, OR 97223 Fax: 503-718-2223 Fax: 503-718-0113

CHAIN OF CUSTODY

Lab #

Customer: Kendall, Mike

Address: 15525 N. Lombard Portland

Sampled by: James S. Johnson

Site Location: OR WA _____

Other: _____

Project Name: _____ Phase: _____ Test: _____

Project # _____ Enrich: _____

LAB ID # _____

DATE _____

TIME _____

MATRIX _____

OF CONTAINERS _____

SWTPH-A _____

SWTPH-B _____

SWTPH-C _____

BTX _____

8169 BBDN VOC _____

8169 HMB VOC _____

R169 VDOC _____

R170 SIM PATH _____

RM2 PCBs _____

BMI Char. Test _____

RCRA Metals (5) _____

Priority Metals (13) _____

AL, SR, AR, BA, BR, CB, CR, CU, CY, FE, NI, PB, PP, Hg, Mn, Mo, Ni, Se, V, Zn, SO, AP, NO, TL, V, Zr

TCLP Metals (5) _____

1301-COLS _____

1302-Z _____

Analysis Request _____

SAMPLE ID _____

Zinc Impact Area

LAB ID # _____

DATE _____

TIME _____

MATRIX _____

OF CONTAINERS _____

SWTPH-A _____

SWTPH-B _____

SWTPH-C _____

BTX _____

8169 BBDN VOC _____

8169 HMB VOC _____

R169 VDOC _____

R170 SIM PATH _____

RM2 PCBs _____

BMI Char. Test _____

RCRA Metals (5) _____

Priority Metals (13) _____

AL, SR, AR, BA, BR, CB, CR, CU, CY, FE, NI, PB, PP, Hg, Mn, Mo, Ni, Se, V, Zn, SO, AP, NO, TL, V, Zr

TCLP Metals (5) _____

1301-COLS _____

1302-Z _____

SAMPLES ARE HELD FOR 90 DAYS

DELIVERED BY: _____

RECEIVED BY: _____

DATE: _____

TIME: _____

SIGNATURE: _____

PRINT NAME: _____

SAMPLES ARE HELD FOR 90 DAYS

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SAMPLES ARE HELD FOR 90 DAYS

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SAMPLES ARE HELD FOR 90 DAYS

DELIVERED BY: _____

RECEIVED BY: _____

DATE: _____

TIME: _____

SIGNATURE: _____

PRINT NAME: _____

SAMPLES ARE HELD FOR 90 DAYS

DELIVERED BY: _____

RECEIVED BY: _____

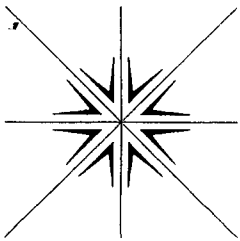
DATE: _____

TIME: _____

SIGNATURE: _____

PRINT NAME: _____

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

January 15, 2010

Jack Waller
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203
TEL: (503) 285-4500
FAX: (503) 285-7733

RE: Zn Impact Area

Dear Jack Waller:

Order No.: 0912222

Specialty Analytical received 1 sample on 12/31/2009 for the analyses presented in the following report.

REVISED REPORT VERSION 1 . Please see case narrative for information on revision.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.


Cindy Hilliard

Project Manager


Technical Review

Specialty Analytical**Date:** 15-Jan-10

CLIENT: Kinder Morgan Bulk Terminal #5
Project: Zn Impact Area
Lab Order: 0912222

CASE NARRATIVE

Report Revision 1.

Data was reviewed and corrected values are included for zinc by EPA 200.7.

Specialty Analytical

Date: 15-Jan-10

CLIENT: Kinder Morgan Bulk Terminal #5
Project: Zn Impact Area

Lab Order: 0912222

Lab ID: 0912222-01
Client Sample ID: Zn Impact Area

Collection Date: 12/31/2009 8:24:00 AM

Matrix: STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
----------	--------	-------	------	-------	----	---------------

ICP METALS

E200.7

Analyst: zau

Zinc

0.632

0.0100

mg/L

1

1/5/2010 5:49:18 PM

CLIENT: Kinder Morgan Bulk Terminal #5
 Work Order: 0912222
 Project: Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: MBLK-24722	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650880						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.0018	0.0100									J
------	--------	--------	--	--	--	--	--	--	--	--	---

Sample ID: LCS-24722	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/6/2010	SeqNo: 651040						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.518	0.0100	0.5	0.0018	103	92.3	111	0	0		
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Sample ID: 0912227-01BMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650884						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	16.69	0.0100	0.5	16.97	-56	93	110	0	0		S,MC
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Sample ID: 0912227-01BMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650885						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	16.68	0.0100	0.5	16.97	-58	93	110	16.69	0.0599	20	S,MC
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Sample ID: 0912227-01BDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 1/4/2010	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650883						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	16.4	0.0100	0	0	0	0	0	16.97	3.42	20	
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Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912222
Project: Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650879						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5058	0.0100	0.5	0	101	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650888						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5243	0.0100	0.5	0	105	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/5/2010	SeqNo: 650899						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5281	0.0100	0.5	0	106	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/6/2010	SeqNo: 651041						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5075	0.0100	0.5	0	102	90	110	0	0		
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Sample ID: ICV		SampType: ICV		TestCode: 200.7		Units: mg/L		Prep Date:		Run ID: TJA IRIS_100105E			
Client ID: ZZZZZ		Batch ID: 24722		TestNo: E200.7				Analysis Date: 1/5/2010		SeqNo: 650878			
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5067	0.0100	0.5	0	101	95	105	0	0		
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Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7		Analysis Date: 1/6/2010	SeqNo: 651039						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912222
Project: Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_100105E						
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7	Analysis Date: 1/6/2010	SeqNo: 651039							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5167	0.0100	0.5	0	103	95	105	0	0		

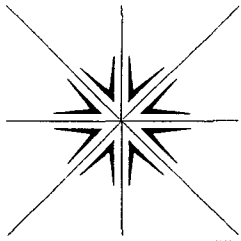
Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

December 28, 2009

Jack Waller
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203
TEL: (503) 285-4500
FAX: (503) 285-7733

RE: Zn Impact Area
Dear Jack Waller:

Order No.: 0912193

Specialty Analytical received 1 sample on 12/16/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,


Cindy Hillyard
Project Manager


Technical Review

Specialty Analytical

Date: 28-Dec-09

CLIENT: Kinder Morgan Bulk Terminal #5
Project: Zn Impact Area

Lab Order: 0912193

Lab ID: 0912193-01
Client Sample ID: Zn Impact Area

Collection Date: 12/16/2009 9:40:00 AM

Matrix: STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
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ICP METALS

E200.7

Analyst: zau

Zinc

1.67

0.0100

mg/L

1

12/17/2009

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912193
Project: Zn Impact Area

ANALYTICAL QC SUMMARY REPORT**TestCode: 200.7**

Sample ID: MBLK-24605	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646246						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	ND	0.0100									

Sample ID: LCS-24605	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646247						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5051	0.0100	0.5	0	101	92.3	111	0	0		

Sample ID: A0912115-02CMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646250						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.6192	0.0100	0.5	0.097	104	93	110	0	0		

Sample ID: A0912115-02CMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646251						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.6003	0.0100	0.5	0.097	101	93	110	0.6192	3.10	20	

Sample ID: A0912115-02CDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 12/17/2009	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646249						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.0962	0.0100	0	0	0	0	0	0.097	0.828	20	

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912193
Project: Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646245						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4974	0.0100	0.5	0	99.5	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646252						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4939	0.0100	0.5	0	98.8	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646263						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4894	0.0100	0.5	0	97.9	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646274						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4964	0.0100	0.5	0	99.3	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646642						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5024	0.0100	0.5	0	100	90	110	0	0		
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Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7		Analysis Date: 12/17/2009	SeqNo: 646244						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0912193
Project: Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091217D						
Client ID: ZZZZZ	Batch ID: 24605	TestNo: E200.7	Analysis Date: 12/17/2009	SeqNo: 646244							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5163	0.0100	0.5	0	103	95	105	0	0		

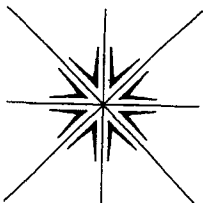
Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.



Specialty Analytical

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

CHAIN OF CUSTODY RECORD

Page ____ of ____

Contact Person/Project Manager Jack Waller

Company KM T-S

Address 15550 N. Compton

Portland of 97203

Phone _____ Fax _____

Project No. _____ Project Name 3rd Time of Day

Project Site Location OR X WA _____ Other _____

Invoice To _____ P.O. No. _____

Collected By:

Signature [Signature]

Printed M. French

Signature_____

Printed: _____

Turn Around Time

☒ Normal 5-7 Business Days

☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

No. of Containers

Analyses

For Laboratory Use

Lab Job No. 0912193

Shipped Via _____

Air Bill No. _____

Temperature On Receipt _____ °C

Specialty Analytical Containers? Y / N

Specialty Analytical Trip Blanks? Y / N

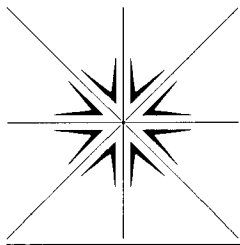
[illegible]

Copies: White-Original

Yellow-Project File

Pink-Customer Copy

KMB00010160



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

November 17, 2009

Jack Waller
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203
TEL: (503) 285-4500
FAX: (503) 285-7733

RE: NOV 13 ZINC

Dear Jack Waller:


Order No.: 0911075

Specialty Analytical received 1 sample on 11/13/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,


Cindy Hillyard
Project Manager


Technical Review

Specialty Analytical

Date: 17-Nov-09

CLIENT: Kinder Morgan Bulk Terminal #5
Project: NOV 13 ZINC

Lab Order: 0911075

Lab ID: 0911075-01

Collection Date: 11/13/2009 2:35:00 PM

Client Sample ID: Zinc

Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		E200.7				Analyst: zau
Zinc	0.262	0.0100		mg/L	1	11/16/2009 3:54:10 PM

Specialty Analytical

Date: 17-Nov-09

CLIENT: Kinder Morgan Bulk Terminal #5

Work Order: 0911075

Project: NOV 13 ZINC

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: MBLK-24396	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 11/16/2009	Run ID: TJA IRIS_091116C
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639875
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Zinc ND 0.0100

Sample ID: LCS-24396	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 11/16/2009	Run ID: TJA IRIS_091116C
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639876
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Zinc 0.5368 0.0100 0.5 0 107 92.3 111 0 0

Sample ID: 0911049-01CMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 11/16/2009	Run ID: TJA IRIS_091116C
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639883
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Zinc 0.5603 0.0100 0.5 0.0386 104 93 110 0 0

Sample ID: 0911049-01CMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 11/16/2009	Run ID: TJA IRIS_091116C
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639884
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Zinc 0.5634 0.0100 0.5 0.0386 105 93 110 0.5603 0.552 20

Sample ID: 0911049-01CDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 11/16/2009	Run ID: TJA IRIS_091116C
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639882
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual

Zinc 0.0383 0.0100 0 0 0 0 0 0.0386 0.780 20

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 1 of 2

KMB00010163

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0911075
Project: NOV 13 ZINC

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091116C						
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639874						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5136	0.0100	0.5	0	103	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091116C						
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639880						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5192	0.0100	0.5	0	104	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091116C						
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639891						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5034	0.0100	0.5	0	101	90	110	0	0		
------	--------	--------	-----	---	-----	----	-----	---	---	--	--

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091116C						
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639902						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5073	0.0100	0.5	0	101	90	110	0	0		
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Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091116C						
Client ID: ZZZZZ	Batch ID: 24396	TestNo: E200.7		Analysis Date: 11/16/2009	SeqNo: 639873						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5044	0.0100	0.5	0	101	95	105	0	0		
------	--------	--------	-----	---	-----	----	-----	---	---	--	--

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

Contact Person/Project Manager Jack Waller
Company Hindler Morgan T-S
Address 15550 N. Lombard
Portland OR 97203
Phone 503 285 4200 Fax 503 285 7733
Project No. _____ Project Name NDV 13 ZINC
Project Site Location OR X WA _____ Other _____
Invoice To _____ P.O. No. _____

Signature G. Thomson
Printed G. Thomson

Signature _____
Printed _____

☒ Normal 5-7 Business Days

☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

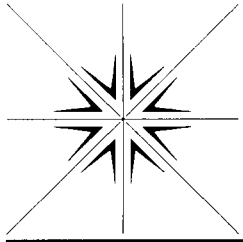
[illegible]

Copies: White-Original

Yellow-Project File

Pink-Customer Copy

KMB00010166



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

November 13, 2009

Neil Maunu
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203
TEL: (503) 285-4500
FAX: (503) 285-7733

RE: Zn Source Area
Dear Neil Maunu:

Order No.: 0911035

Specialty Analytical received 1 sample on 11/6/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,


Cindy Hillyard
Project Manager


Technical Review

Specialty Analytical

Date: 13-Nov-09

CLIENT: Kinder Morgan Bulk Terminal #5
Project: Zn Source Area

Lab Order: 0911035

Lab ID: 0911035-01
Client Sample ID: Zn Source Area

Collection Date: 11/6/2009 11:40:00 AM

Matrix: STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		E200.7				Analyst: zau
Zinc	0.373	0.0100		mg/L	1	11/11/2009 3:26:11 PM

CLIENT: Kinder Morgan Bulk Terminal #5

Work Order: 0911035

Project: Zn Source Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: MBLK-24378	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 11/11/2009	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639301						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	ND	0.0100									
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Sample ID: LCS-24378	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 11/11/2009	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639302						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5044	0.0100	0.5	0	101	92.3	111	0	0		
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Sample ID: 0911045-02CMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 11/11/2009	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639306						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5322	0.0100	0.5	0.0674	93	93	110	0	0		S,RP
------	--------	--------	-----	--------	----	----	-----	---	---	--	------

Sample ID: 0911045-02CMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 11/11/2009	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639307						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5592	0.0100	0.5	0.0674	98.4	93	110	0.5322	4.95	20	
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Sample ID: 0911045-02CDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 11/11/2009	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639304						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.0563	0.0100	0	0	0	0	0	0.0674	17.9	20	
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Qualifiers: ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0911035
Project: Zn Source Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639300						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4916	0.0100	0.5	0	98.3	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639305						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4904	0.0100	0.5	0	98.1	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639316						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.4897	0.0100	0.5	0	97.9	90	110	0	0		
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Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: R58329	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639326						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chromium	0.2519	0.00500	0.25	0	101	90	110	0	0		
Copper	0.4678	0.0100	0.5	0	93.6	90	110	0	0		
Lead	0.999	0.0200	1	0	99.9	90	110	0	0		
Zinc	0.4893	0.0100	0.5	0	97.9	90	110	0	0		

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091111C						
Client ID: ZZZZZ	Batch ID: 24378	TestNo: E200.7		Analysis Date: 11/11/2009	SeqNo: 639299						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Zinc	0.5042	0.0100	0.5	0	101	95	105	0	0		
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Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.

**11711 SE Capps Road
Clackamas, OR 97015
Phone: 503-607-1331
Fax: 503-607-1336**

Contact Person/Project Manager Neil Mannu
Company Kinder Morgan T-5
Address _____

Phone _____ Fax _____

Project No. _____ Project Name Zn Source Area

Project Site Location OR WA WA Other

Invoice To _____ **P.O. No.** _____

Collected By:

Signature [Signature]

Printed M. Webb

Signature_____

Printed _____

Turn Around Time

☐ Normal 5-7 Business Days☐ Rush

Specify

Rush Analyses Must Be Scheduled With The Lab In Advance

Analyses

For Laboratory Use

Lab Job No. 0911035

Shipped Via Special

Air Bill No. 100

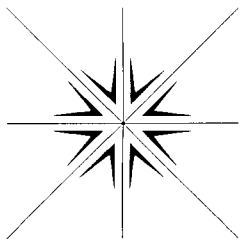
Temperature On Receipt 5 °CSpecialty Analytical Containers? ☒ Y ☐ N

Specialty Analytical Trip Blanks? Y / N

[illegible]

Pink-Customer Copy

KMB00010172



Specialty Analytical

11711 SE Capps Road
Clackamas, OR 97015
(503) 607-1331
Fax (503) 607-1336

October 30, 2009

Neil Maunu
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203
TEL: (503) 285-4500
FAX: (503) 285-7733

RE: SW-Zn Impact Area

Dear Neil Maunu:

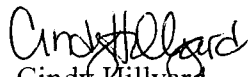
Order No.: 0910176


Specialty Analytical received 1 sample on 10/26/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,


Cindy Hillyard
Project Manager


Technical Review

Specialty Analytical

Date: 30-Oct-09

CLIENT: Kinder Morgan Bulk Terminal #5
Project: SW-Zn Impact Area

Lab Order: 0910176

Lab ID: 0910176-01

Collection Date: 10/23/2009 11:27:00 AM

Client Sample ID: SW-Zn Area

Matrix: STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
----------	--------	-------	------	-------	----	---------------

ICP METALS

E200.7

Analyst: zau

Zinc

1.10

0.0100

mg/L

1

10/29/2009 11:05:16 AM

Specialty Analytical

Date: 30-Oct-09

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0910176
Project: SW-Zn Impact Area

ANALYTICAL QC SUMMARY REPORT**TestCode: 200.7**

Sample ID: MBLK-24269	SampType: MBLK	TestCode: 200.7	Units: mg/L	Prep Date: 10/28/2009	Run ID: TJA IRIS_091029A
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636027
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Zinc	ND	0.0100			

Sample ID: LCS-24269	SampType: LCS	TestCode: 200.7	Units: mg/L	Prep Date: 10/28/2009	Run ID: TJA IRIS_091029A
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636028
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Zinc	0.4933	0.0100	0.5	0	98.7 92.3 111 0 0

Sample ID: 0910199-02BMS	SampType: MS	TestCode: 200.7	Units: mg/L	Prep Date: 10/28/2009	Run ID: TJA IRIS_091029A
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636032
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Zinc	0.5114	0.0100	0.5	0.0156	99.2 93 110 0 0

Sample ID: 0910199-02BMSD	SampType: MSD	TestCode: 200.7	Units: mg/L	Prep Date: 10/28/2009	Run ID: TJA IRIS_091029A
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636033
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Zinc	0.5167	0.0100	0.5	0.0156	100 93 110 0.5114 1.03 20

Sample ID: 0910199-02BDUP	SampType: DUP	TestCode: 200.7	Units: mg/L	Prep Date: 10/28/2009	Run ID: TJA IRIS_091029A
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636031
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Zinc	0.0156	0.0100	0	0	0 0 0 0.0156 0 20

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 1 of 2

KMB00010175

CLIENT: Kinder Morgan Bulk Terminal #5
Work Order: 0910176
Project: SW-Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091029A						
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636030						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5028	0.0100	0.5	0	101	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091029A						
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636041						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5007	0.0100	0.5	0	100	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091029A						
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636052						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.4949	0.0100	0.5	0	99	90	110	0	0		

Sample ID: CCV	SampType: CCV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091029A						
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636056						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5001	0.0100	0.5	0	100	90	110	0	0		

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L	Prep Date:	Run ID: TJA IRIS_091029A						
Client ID: ZZZZZ	Batch ID: 24269	TestNo: E200.7		Analysis Date: 10/29/2009	SeqNo: 636026						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5059	0.0100	0.5	0	101	95	105	0	0		

Qualifiers: ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater than the maximum contaminant level of the TCLP regulatory limit.



Kinder Morgan Terminals

July 13, 2009

Mr. Dennis Jurries, PE
DEQ NWR Storm Water Engineer
2020 SW Fourth Avenue, Suite 400
Portland, OR 97201-4987

Re: Annual Stormwater Report for 2009

Ref: Permit #101377

Dear Mr. Jurries:

Enclosed is Portland Bulk Terminal Five's annual Stormwater Report for the year ending June 30, 2009. Please note that the "Suspended Solids Totals" results are not available for the sample date of 02/10/09 due to a lab error. Historically, sample results for suspended solids have been significantly below the permit benchmark limits therefore, we have reason to believe there was not an exceedance for the 2/10/09 sample. Measures have been taken to ensure these kinds of errors are prevented in the future.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,

KINDER MORGAN BULK TERMINALS

A handwritten signature in black ink, appearing to read 'Jack Waller', is written over the printed name.

Jack Waller
Manager, Terminal 5

Cc: Regional EHS Manager
File



Kinder Morgan Terminals

July 13, 2009

Mr. Timothy P. Dean
City of Portland - Environmental Services
Water Pollution Control Laboratory
Industrial Stormwater Program
6543 N. Burlington Avenue
Portland, OR 97203-5452

Re: Annual Stormwater Report for 2009

Ref: Permit #101377

Dear Mr. Dean:

Enclosed is Portland Bulk Terminal Five's annual Stormwater Report for the year ending June 30, 2009. Please note that the "Suspended Solids Totals" results are not available for the sample date of 02/10/09 due to a lab error. Historically, sample results for suspended solids have been significantly below the permit benchmark limits therefore, we have reason to believe there was not an exceedance for the 2/10/09 sample. Measures have been taken to ensure these kinds of errors are prevented in the future.

Please note that there are daily visual monitoring documents available on site.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,


KINDER MORGAN BULK TERMINALS

A handwritten signature in black ink, appearing to read 'J. Waller', is written over the printed name.

Jack Waller
Manager, Terminal 5

CC: Regional EHS Manager
File

Industrial Stormwater Discharge Monitoring Report - 1200-Z Permit

Permittee Legal Name:	Kinder Morgan	ODEQ File No./Facility ID:	70613	 State of Oregon Department of Environmental Quality
Facility Common Name:	Portland Bulk Terminals	Reporting Period:	July 1, 2008 to June 30, 2009	
Facility Location:	15550 North Lombard, Portland, OR 97203	Laboratory Name:	TestAmerica	
County:	Moulthomah	Laboratory ORELAP #:	OR100021	

Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility has more than 4 sampling points). **You MUST also attach a copy of laboratory results sheet(s) and associated QA/QC information to this form.**

Name or Number of Sampling Point(s) (group data per sampling point)	Sample Date	pH **	Suspended Solids, Total **	Oil and Grease, Total **	Copper, Total	Lead, Total	Zinc, Total	E. coli *	
		s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	counts/100 ml	
Outfall 001	11/10/2008	6.42	32.7	ND	0.00399	0.0011	0.621		* Only applies to landfills accepting septage/biosolids and sewage treatment plants. ** Effluent limits for these parameters apply to some industries - see permit, Schedule A.7. Note 1: Submit this report to the appropriate DEQ regional or agent offices (see below) annually by July 31st. The report must contain the results of all stormwater monitoring conducted during the year. If you have a monitoring waiver for one or more of the pollutant(s), please report "M" in the column(s)-see permit-Schedule B.3. Note 2: Non-detects must be reported as "ND" along with the applicable method detection limit in parentheses - e.g. ND (0.001). Note 3: If a stormwater sampling result exceeds any of the benchmark values, the permit registrant must, within 30 calendar days of receiving the sampling results, investigate the cause of the benchmark exceedance(s), review the SWPCP and submit an Action Plan for department or agent approval. Note 4: For the 4th year of coverage under the permit that became effective on July 1, 2007, report the geometric mean value of the last 4 samples collected for each pollutant parameter, from each sampling point. The geometric mean value is automatically calculated if using the Excel version of the DMR form.
Outfall 001	12/12/008	6.48	64	ND	0.0188	0.0057	1.02		
Outfall 001	2/10/2009	6.86	*See Cover Letter	ND	ND	ND	0.209		
Outfall 001	3/14/2009	7.19	20	ND	0.0072	0.00135	0.261		
Geometric Mean (Note 4)		6.730	34.720		0.008	0.002	0.431		
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Permit Benchmark		5.5 - 9.0	130	10	0.1	0.4	0.6	406	

Name/Title Principal Executive Officer or Authorized Delegate	
(Please Print) <u>Jack Waller</u>	
Telephone: 503-285-4200	Email: <u>wallerj@kindermorgan.com</u>
I certify, under penalty of law, that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.	
Sign here: <u>[Signature]</u>	Date: <u>7/13/09</u>

See reverse side for additional visual monitoring requirements

Monthly Visual Observations

Record Visual Observations for Oil and Grease Sheen and Floating Solids:

	Oil and Grease Sheen - No visible sheen allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.		Floating Solids (associated with industrial activities) - No visible discharge allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.
	Date	Observations (please note the sampling point(s) name or number)	
July	No Discharge		
August	No Discharge		
September	No Discharge		
October	No Discharge		
November	11/10/2008	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
December	12/12/2008	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
January	1/2/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
February	2/24/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
March	3/28/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
April	4/28/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
May	5/5/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	
June	6/19/2009	No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.	

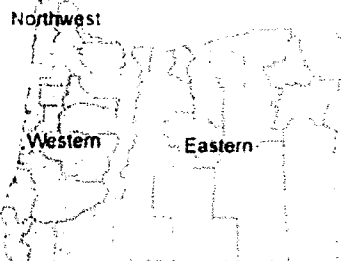
For facilities located within the following local jurisdictions, please submit one (1) copy of this report and laboratory results sheet(s) and QA/QC documentation to the local jurisdiction annually by July 31st:

Clean Water Services
Industrial Stormwater
2550 SW Hillsboro Hwy.
Hillsboro, OR 97123

City of Portland
Industrial Stormwater Section
Water Pollution Control Lab
6543 N Burlington Ave.
Portland, OR 97203-5452

City of Eugene
Industrial Source Control
410 River Ave.
Eugene, OR 97404

For all other locations, please submit one (1) copy of this report and laboratory results sheet(s) and the QA/QC documentation to the appropriate DEQ regional office annually by July 31st:



DEQ Northwest Region Office
2020 SW 4th Ave. Suite 400
Portland, OR 97201
Phone: (503) 229-5263
Hours: 8 am - 5 pm

DEQ Eastern Region Office
300 SE Reed Market Rd.
Bend, OR 97702-2237
Phone: (541) 388-6146
Hours: 8 am - 5 pm

DEQ Western Region Office
(Benton, Lincoln, Marion, Polk, and Yamhill counties)
750 Front St NE, #120
Salem, OR 97301-1039
Phone: (503) 378-8240
Hours: Mon - Thurs: 8 am - 5 pm
Fri: 8 am - noon, 1 - 5 pm

DEQ Western Region Office
(Lane and Linn counties)
1102 Lincoln St. Suite 210
Eugene, OR 97401
Phone: (541) 686-7838
Hours: 8 am - 5 pm

DEQ Western Region Office
(Coos, Curry, Douglas, Jackson, and Josephine counties)
221 Stewart Ave. Suite 201
Medford, OR 97501
Phone: (541) 776-6010
Hours: 8 am - noon, 1 - 5 pm

March 30, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 03/16/09 10:45.
The following list is a summary of the Work Orders contained in this report, generated on 03/30/09 15:14.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PSC0443	Stormwater	NA

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Grecne

Report Created:
03/30/09 15:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSC0443-01	Water	03/14/09 17:15	03/16/09 10:45
Culvert	PSC0443-02	Water	03/14/09 17:10	03/16/09 10:45

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)				Water			Sampled: 03/14/09 17:15			
Oil & Grease	EPA 1664	ND	---	4.76	mg/l	1x	9030895	03/27/09 15:00	03/30/09 07:55	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Grecne**

Report Created:
03/30/09 15:14

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)		Water				Sampled: 03/14/09 17:15				
Copper	EPA 200.8	0.00720	----	0.00200	mg/l	1x	9030564	03/18/09 11:28	03/21/09 05:46	
Lead	"	0.00135	----	0.00100	"	"	"	"	"	
Zinc	"	0.261	----	0.00500	"	"	"	"	"	
PSC0443-02 (Culvert)		Water				Sampled: 03/14/09 17:10				
Copper	EPA 200.8	0.0103	----	0.00200	mg/l	1x	9030564	03/18/09 11:28	03/21/09 06:00	
Lead	"	0.00195	----	0.00100	"	"	"	"	"	
Zinc	"	0.295	----	0.00500	"	"	"	"	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02 (Culvert)		Water			Sampled: 03/14/09 17:10					
Copper	EPA 200.8	0.00535	----	0.00200	mg/l	1x	9030756	03/24/09 11:38	03/25/09 22:24	
Lead	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	0.107	----	0.00500	"	"	"	"	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)		Water		Sampled: 03/14/09 17:15						
Total Suspended Solids	SM 2540D	20.0	----	10.0	mg/l	1x	9030578	03/18/09 14:00	03/18/09 17:34	

TestAmerica Portland

Darrell Auvi For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)		Water		Sampled: 03/14/09 17:15						
pH	EPA 150.1	7.19	----		pH Units	1x	9030675	03/14/09 17:20	03/14/09 17:25	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Lab Filtration
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02 (Culvert)				Water			Sampled: 03/14/09 17:10			
Lab Filtration	NCA SOP	ND	-----	1.00	N/A	1x	9030482	03/16/09 17:41	03/16/09 18:31	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results


TestAmerica Portland

QC Batch: 9030895

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030895-BLK1)										Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	03/30/09 07:55	
LCS (9030895-BS1)										Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	35.9	---		mg/l	1x	--	40.1	89.5%	(78-114)	--	--	03/30/09 07:55	
Matrix Spike (9030895-MS1)										QC Source: PSC0439-01 Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	25.4	---		mg/l	1x	0.385	40.1	62.4%	(78-114)	--	--	03/30/09 07:55	M8
Matrix Spike Dup (9030895-MSD1)										QC Source: PSC0439-01 Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	29.2	---		mg/l	1x	0.385	40.1	71.9%	(78-114)	13.9%	(18)	03/30/09 07:55	M8

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greenc

Report Created:

03/30/09 15:14

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030564

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030564-BLK1)										Extracted: 03/18/09 11:28				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	03/21/09 03:50	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9030564-BS1)										Extracted: 03/18/09 11:28				
Copper	EPA 200.8	0.0968	---	0.00200	mg/l	1x	--	0.100	96.8%	(85-115)	--	--	03/21/09 03:58	
Lead	"	0.0906	---	0.00100	"	"	--	"	90.6%	"	--	--	"	
Zinc	"	0.0866	---	0.00500	"	"	--	"	86.6%	"	--	--	"	
Duplicate (9030564-DUP1)										QC Source: PSC0426-01 Extracted: 03/18/09 11:28				
Copper	EPA 200.8	1.35	---	0.0100	mg/l	5x	1.43	--	--	--	5.48%	(20)	03/21/09 04:41	
Lead	"	ND	---	0.00500	"	"	ND	--	--	--	11.4%	"	"	
Zinc	"	0.0516	---	0.0250	"	"	0.0564	--	--	--	8.70%	"	"	
Matrix Spike (9030564-MS1)										QC Source: PSC0426-01 Extracted: 03/18/09 11:28				
Copper	EPA 200.8	1.51	---	0.0100	mg/l	5x	1.43	0.100	83.5%	(75-125)	--	--	03/21/09 04:48	
Lead	"	0.0922	---	0.00500	"	"	0.00370	"	88.6%	"	--	--	"	
Zinc	"	0.148	---	0.0250	"	"	0.0564	"	91.8%	(70-130)	--	--	"	
Matrix Spike (9030564-MS2)										QC Source: PSC0443-01 Extracted: 03/18/09 11:28				
Copper	EPA 200.8	0.0958	---	0.00200	mg/l	1x	0.00720	0.100	88.6%	(75-125)	--	--	03/21/09 05:53	
Lead	"	0.0835	---	0.00100	"	"	0.00135	"	82.1%	"	--	--	"	
Zinc	"	0.338	---	0.00500	"	"	0.261	"	76.9%	(70-130)	--	--	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greene

Report Created:

03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030756

Water Preparation Method: EPA 200/3005 Diss

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030756-BLK1)										Extracted: 03/24/09 11:38				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	03/25/09 22:13	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9030756-BS1)										Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.0943	---	0.00200	mg/l	1x	--	0.100	94.3%	(85-115)	--	--	03/25/09 22:19	
Lead	"	0.103	---	0.00100	"	"	--	"	103%	"	--	--	"	
Zinc	"	0.101	---	0.00500	"	"	--	"	101%	"	--	--	"	
Duplicate (9030756-DUP1)										QC Source: PSC0443-02 Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.00530	---	0.00200	mg/l	1x	0.00535	--	--	--	0.845% (20)		03/25/09 22:29	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.106	---	0.00500	"	"	0.107	--	--	--	1.22%	"	"	
Matrix Spike (9030756-MS1)										QC Source: PSC0444-01 Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.103	---	0.00200	mg/l	1x	0.0106	0.100	92.1%	(70-130)	--	--	03/25/09 22:45	
Lead	"	0.101	---	0.00100	"	"	0.000935	"	99.7%	"	--	--	"	
Zinc	"	0.208	---	0.00500	"	"	0.109	"	98.8%	"	--	--	"	
Matrix Spike (9030756-MS2)										QC Source: PSC0573-02 Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.110	---	0.00200	mg/l	1x	0.0200	0.100	90.4%	(70-130)	--	--	03/25/09 23:50	
Lead	"	0.100	---	0.00100	"	"	0.000243	"	99.7%	"	--	--	"	
Zinc	"	0.645	---	0.00500	"	"	0.553	"	92.1%	"	--	--	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greenc**

Report Created:
03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030578

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030578-BLK1)							Extracted: 03/18/09 14:00							
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	03/18/09 17:34	
LCS (9030578-BS1)							Extracted: 03/18/09 14:00							
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	03/18/09 17:34	
Duplicate (9030578-DUP1)				QC Source: PSC0445-01				Extracted: 03/18/09 14:00						
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	ND	--	--	--	NR	(20)	03/18/09 17:34	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
03/30/09 15:14

Lab Filtration - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030482

Water Preparation Method: Lab Filter

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030482-BLK1)										Extracted: 03/16/09 17:41				
Lab Filtration	NCA SOP	ND	---	1.00	N/A	1x	--	--	--	--	--	--	03/16/09 18:31	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greenc

Report Created:

03/30/09 15:14

Notes and Definitions

Report Specific Notes:

M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B.
*MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*.
Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.
Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

[illegible]

KMB00010197

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland

Sampler: Lawrence Spangler

Site: Outfall 001

Project: Stormwater

Date: 03-14-09

Time: 1705

Sample Matrix:

☒ Water

☐ Soil

☐ HW

☐ Chemical

☐ Drinking

Sampling Method:

Grab

Grab Sampling Equipment:

Dipper

Time: 1710, 1715

Field Data:

pH: 7.19

pH calibration-7.00 buffer reading: 7.05

pH calibration slope: 99.3

Field Conditions:

Weather: ☐ Sunny

☐ Partly cloudy

☒ Cloudy

☐ Snowing

Rainfall: ☐ Heavy

☒ Continuous

☐ Intermittent

☒ Light

☐ None

Sample Characteristics:

Color: _____

Odor: _____

TSS: _____

Sediment: _____

Foam: _____

Observations and Comments:

pacific
7-5

TestAmerica Portland
Sample Receiving Checklist

Work Order #: PSC 0443 Date/Time Received: 03-16-09 1045
Client Name and Project: Kinder Morgan STORMWATER

PM to Complete This Section: Yes No
Residual Chlorine Check Required: ☐ ☐ Quarantined: ☐ ☐
Quote #:
Special Instructions:

Time Zone:
☐ EDT/EST ☐ CDT/CST ☐ MDT/MST ☐ PDT/PST ☐ OTHER

Unpacking Checks:

Cooler #(s): 1
Temperatures: 0.1c
Digi #1 Digi #2 IR Gun
☐ ☐ ☒ (☐ Plastic ☒ Glass)

Temperature out of Range:

☐ Not enough or No Ice
☐ Ice Melted
☐ W/in 4 Hrs of collection
☐ Other:

N/A Yes No

Initials: jm

- ☒ ☐ ☐ 1. If ESI client, were temp blanks received? If no, document on NOD.
☒ ☐ ☐ 2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
☒ ☐ ☐ 3. Chain of Custody present? If no, document on NOD.
☒ ☐ ☐ 4. Bottles received intact? If no, document on NOD.
☒ ☐ ☐ 5. Sample is not multiphasic? If no, document on NOD.
☒ ☐ ☐ 6. Proper Container and preservatives used? If no, document on NOD.
☐ ☒ ☐ 7. pH of all samples checked and meet requirements? If no, document on NOD.
☒ ☐ ☐ 8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
☒ ☐ ☐ 9. HF Dilution required?
☒ ☐ ☐ 10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
☒ ☐ ☐ 11. Did chain of custody agree with samples received? If no, document on NOD.
☒ ☐ ☐ 12. Were VOA/Oil Syringe samples without headspace?
☒ ☐ ☐ 13. Were VOA vials preserved? ☐ HCL ☐ Sodium Thiosulfate ☐ Ascorbic Acid
☐ ☒ ☐ 14. Did samples require preservation with sodium thiosulfate?
☒ ☐ ☐ 15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
☒ ☒ ☐ 16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
☒ ☐ ☐ 17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
☒ ☐ ☐ 18. Are analyses with short holding times received in hold?
☒ ☐ ☐ 19. Was Standard Turn Around (TAT) requested?
☒ ☐ ☐ 20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TestAmerica Portland
Sample Receiving Checklist

Work Order #: PSC0443

Login Checks:

Initials: K

N/A Yes No

- ☒ ☒ ☐ 21. Sufficient volume provided for all analysis? If no, document on NOD & contact PM.
- ☒ ☐ ☐ 22. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM.
- ☒ ☐ ☐ 23. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times?
- ☐ ☒ ☐ 24. Were special log in instructions read and followed?
- ☐ ☒ ☐ 25. Were tests logged checked against the COC?
- ☐ ☒ ☐ 26. Were rush notices printed and delivered?
- ☒ ☐ ☐ 27. Were short hold notices printed and delivered?
- ☒ ☐ ☐ 28. Were subcontract COCs printed?
- ☒ ☐ ☐ 29. Was HF dilution logged?

Labeling and Storage Checks:

Initials: pm

N/A Yes No

- ☒ ☐ ☐ 30. Were the subcontracted samples/containers put in Sx fridge?
- ☐ ☒ ☐ 31. Were sample bottles and COC double checked for dissolved/filtered metals?
- ☒ ☐ ☐ 32. Did the sample ID, Date, and Time from label match what was logged?
- ☒ ☐ ☐ 33. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge?
- ☒ ☐ ☐ 34. Were HF stickers affixed to each container, and containers stored in Sx fridge?

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

February 17, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 02/11/09 13:45.
The following list is a summary of the Work Orders contained in this report, generated on 02/17/09 16:22.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PSB0312	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
02/17/09 16:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSB0312-01	Water	02/10/09 13:30	02/11/09 13:45
Pond	PSB0312-02	Water	02/10/09 13:45	02/11/09 13:45
Culvent	PSB0312-03	Water	02/10/09 13:25	02/11/09 13:45

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01 (Outfall 001)				Water			Sampled: 02/10/09 13:30			
Oil & Grease	EPA 1664	ND	-----	2.36	mg/l	1x	9020400	02/12/09 15:17	02/16/09 20:11	

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
02/17/09 16:22

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01 (Outfall 001)		Water				Sampled: 02/10/09 13:30				
Copper	EPA 200.8	ND	-----	0.00200	mg/l	1x	9020373	02/12/09 09:12	02/13/09 00:05	
Lead	"	ND	-----	0.00100	"	"	"	"	"	
Zinc	"	0.209	-----	0.00500	"	"	"	"	"	
PSB0312-02 (Pond)		Water				Sampled: 02/10/09 13:45				
Zinc	EPA 200.8	ND	-----	0.00500	mg/l	1x	9020373	02/12/09 09:12	02/13/09 00:12	
PSB0312-03 (Culvent)		Water				Sampled: 02/10/09 13:25				
Zinc	EPA 200.8	4.31	-----	0.0500	mg/l	10x	9020373	02/12/09 09:12	02/13/09 00:55	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
02/17/09 16:22

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01 (Outfall 001)				Water			Sampled: 02/10/09 13:30			
pH	EPA 150.1	6.86	----		pH Units	1x	9020389	02/10/09 13:35	02/10/09 13:40	

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9020400

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9020400-BLK1)										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	02/16/09 16:45	
LCS (9020400-BS1)										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	35.8	---		mg/l	1x	--	40.0	89.5%	(78-114)	--	--	02/16/09 16:45	
Matrix Spike (9020400-MS1)										QC Source: PSB0128-04				
										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	24.4	---		mg/l	1x	0.490	40.0	59.8%	(78-114)	--	--	02/16/09 16:45	M8
Matrix Spike Dup (9020400-MSD1)										QC Source: PSB0128-04				
										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	31.6	---		mg/l	1x	0.490	40.0	77.8%	(78-114)	25.7%	(18)	02/16/09 16:45	M8

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greenc

Report Created:

02/17/09 16:22

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9020373

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9020373-BLK1)										Extracted: 02/12/09 09:12				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	02/12/09 20:57	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9020373-BS1)										Extracted: 02/12/09 09:12				
Copper	EPA 200.8	0.101	---	0.00200	mg/l	1x	--	0.100	101%	(85-115)	--	--	02/12/09 21:04	
Lead	"	0.0980	---	0.00100	"	"	--	"	98.0%	"	--	--	"	
Zinc	"	0.0983	---	0.00500	"	"	--	"	98.3%	"	--	--	"	
Duplicate (9020373-DUP1)										QC Source: PSB0162-06 Extracted: 02/12/09 09:12				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	ND	--	--	--	NR	(20)	02/12/09 21:19	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	9.93%	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	0.434%	"	"	
Matrix Spike (9020373-MS1)										QC Source: PSB0204-04 Extracted: 02/12/09 09:12				
Copper	EPA 200.8	0.0960	---	0.00200	mg/l	1x	0.000680	0.100	95.3%	(75-125)	--	--	02/12/09 21:48	
Lead	"	0.0964	---	0.00100	"	"	ND	"	96.4%	"	--	--	"	
Zinc	"	0.100	---	0.00500	"	"	0.00257	"	97.8%	(70-130)	--	--	"	
Matrix Spike (9020373-MS2)										QC Source: PSB0207-02 Extracted: 02/12/09 09:12				
Copper	EPA 200.8	1.02	---	0.0200	mg/l	10x	0.906	0.100	114%	(75-125)	--	--	02/13/09 00:48	
Lead	"	0.0891	---	0.00100	"	1x	0.00559	"	83.5%	"	--	--	02/12/09 22:31	
Zinc	"	2.85	---	0.0500	"	10x	2.69	"	159%	(70-130)	--	--	02/13/09 00:48	MHA

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
02/17/09 16:22

Notes and Definitions

Report Specific Notes:

- M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MHA - Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

TestAmerica Laboratories, Inc.

[illegible]

TestAmerica Sample Receipt Checklist

Received by:

(section A)

Date: 02-11-09

Time: 1:45

Initials: [Signature]

Unpacked by:

(section B)

Date: 2/11/09

Initials: [Signature]

Logged-in by:

Date: 2/11/09

Initials: [Signature]

Work Order No.

Client: Kinder Morgan

Project: Stormwater

Temperature out of range:

- ☐ Not enough Ice
- ☐ No Ice
- ☐ Ice Melted
- ☐ Win 4 Hours
- ☐ Other:

Digi #1

Digi #2

Temperature Blank: _____ °C

Cooler Temperature (IR): 1.2 °C plastic (glass) NA (oil/air samples, ESI client)

A

Custody Seals: (# _____)

Signature: Y N Dated: _____

☒ None

Container Type:

☒ #Cooler(s)

☐ #Box(s)

☐ None (☐ #Other: _____)

Coolant Type:

☐ Gel Ice

☒ Loose Ice

☐ None

Packing Material:

☐ Bubble Bags

☐ Styrofoam Cubbies

☐ Peanuts

☒ None (☐ Other: _____)

Received from:

☒ TA Courier

☐ Envoy

☐ UPS

☐ Fed Ex

☐ Client

☐ TDP

☐ DHL

☐ SDS

☐ Mid-Valley

☐ GS/TA

☐ GS/Envoy

☐ Other: _____

B

Sample Status:
(If N circled, see NOD)

General:

Intact? Y N

Containers Match COC? Y N none given

IDs Match COC? Y N

For Analyses Requested:

Cyanide Checked? Y N NA

Correct Type & Preservation? Y N

Adequate Volume? Y N

Within Hold Time? Y N

HF Dilution Required? Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace? Y N NA

TB on COC? not provided Y N NA

Metals:

HNO3 Preserved? Y N NA

Dissolved Metals Filtered? Y N NA

C

***ESI Clients Only:

Temperature Blank: _____ °C not provided Digi: #1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX Goldstreak UPS DHL Other _____

Project Managers:

Comments:

PM Reviewed: _____ (Initial/Date)

TestAmerica

LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland

Sampler: Lawrence Spangler

Site: Outfall 001

Project: Stormwater

Date: 02-10-09

Time: 1330

Sample Matrix:

Water

☐ Soil

☐ HW

☐ Chemical

☐ Drinking

Sampling Method:

Grab

Grab Sampling Equipment:

Dipper

Time: 1330

pond 1345 culvert 1325

Field Data:

pH: 6.86

pH calibration-7.00 buffer reading: 7.05

Field Conditions:

Weather:

☐ Sunny

☐ Partly cloudy

☒ Cloudy

☐ Snowing

Rainfall:

☒ Heavy

☒ Continuous

☐ Intermittent

☐ Light

☐ None

Sample Characteristics:

Color: _____

Odor: _____

TSS: _____

Sediment: _____

Foam: _____

Observations and Comments:

Revision #0 8/19/08

KMB00010211

January 03, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 12/15/08 13:45.
The following list is a summary of the Work Orders contained in this report, generated on 01/03/09
16:03.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PRL0504	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRL0504-01	Water	12/12/08 16:10	12/15/08 13:45

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)				Water				Sampled: 12/12/08 16:10		
Oil & Grease	EPA 1664	ND	—	2.36	mg/l	1x	8120852	12/31/08 16:45	01/01/09 15:50	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)		Water		Sampled: 12/12/08 16:10						
Copper	EPA 200.8	0.0188	----	0.00200	mg/l	1x	8120644	12/18/08 14:05	12/19/08 01:20	
Lead	"	0.00570	----	0.00100	"	"	"	"	"	
Zinc	"	1.02	----	0.0500	"	10x	"	"	12/19/08 15:32	

TestAmerica Portland

Brian L Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)	Water				Sampled: 12/12/08 16:10				
Total Suspended Solids	SM 2540D	64.0	----	4.00	mg/l	1x	8120673	12/19/08 11:02	12/19/08 13:15	

TestAmerica Portland

Bryan L. Cove

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)										
				Water				Sampled: 12/12/08 16:10		
pH	EPA 150.1	6.48	----		pH Units	1x	8120597	12/12/08 16:15	12/12/08 16:20	

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8120852

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120852-BLK1)														
Extracted: 12/31/08 14:00														
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	01/01/09 15:50	
LCS (8120852-BS1)														
Extracted: 12/31/08 14:00														
Oil & Grease	EPA 1664	35.1	---		mg/l	1x	--	40.0	87.8%	(78-114)	--	--	01/01/09 15:50	
Matrix Spike (8120852-MS1)														
QC Source: PRL0495-01														
Extracted: 12/31/08 14:00														
Oil & Grease	EPA 1664	34.3	---		mg/l	1x	1.62	40.0	81.7%	(78-114)	--	--	01/01/09 15:50	
Matrix Spike (8120852-MS2)														
QC Source: PRL0527-01														
Extracted: 12/31/08 14:00														
Oil & Grease	EPA 1664	29.4	---		mg/l	1x	23.6	40.0	14.5%	(78-114)	--	--	01/01/09 15:50	MHA

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**

Report Created:
01/03/09 16:03

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8120644

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	---------------	-----------	-------	----------	-------	----------	----------	-------

Blank (8120644-BLK1)

Extracted: 12/18/08 14:05

Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	12/18/08 23:56	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	

LCS (8120644-BS1)

Extracted: 12/18/08 14:05

Copper	EPA 200.8	0.0970	---	0.00200	mg/l	1x	--	0.100	97.0%	(85-115)	--	--	12/19/08 00:01	
Lead	"	0.0902	---	0.00100	"	"	--	"	90.2%	"	--	--	"	
Zinc	"	0.0938	---	0.00500	"	"	--	"	93.8%	"	--	--	"	

Duplicate (8120644-DUP1)

QC Source: PRL0496-01

Extracted: 12/18/08 14:05

Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	ND	--	--	--	5.88%	(20)	12/19/08 00:12	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	4.51%	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	2.22%	"	"	

Matrix Spike (8120644-MS1)

QC Source: PRL0496-02

Extracted: 12/18/08 14:05

Copper	EPA 200.8	0.0980	---	0.00200	mg/l	1x	0.00201	0.100	96.0%	(75-125)	--	--	12/19/08 00:22	
Lead	"	0.0875	---	0.00100	"	"	0.000284	"	87.2%	"	--	--	"	
Zinc	"	0.0972	---	0.00500	"	"	0.00241	"	94.8%	(70-130)	--	--	"	

Matrix Spike (8120644-MS2)

QC Source: PRL0504-01

Extracted: 12/18/08 14:05

Copper	EPA 200.8	0.112	---	0.00200	mg/l	1x	0.0188	0.100	93.0%	(75-125)	--	--	12/19/08 01:25	
Lead	"	0.0886	---	0.00100	"	"	0.00570	"	82.9%	"	--	--	"	
Zinc	"	1.11	---	0.0500	"	10x	1.02	"	87.0%	(70-130)	--	--	12/19/08 15:38	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greene

Report Created:

01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8120673

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120673-BLK1)										Extracted: 12/19/08 11:02				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	12/19/08 13:15	
LCS (8120673-BS1)										Extracted: 12/19/08 11:02				
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	12/19/08 13:15	
Duplicate (8120673-DUP1)										QC Source: PRL0584-01				
										Extracted: 12/19/08 11:02				
Total Suspended Solids	SM 2540D	20.0	---	10.0	mg/l	1x	20.0	--	--	--	0.00%	(20)	12/19/08 13:15	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Notes and Definitions

Report Specific Notes:

- MHA - Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

PRLO504
TestAmerica

TestAmerica Laboratories, Inc.

TestAmerica Sample Receipt Checklist

Received by:

Unpacked by:

Logged-in by:

Work Order No. PRLO504

(section A)

(section B)

Client: Kinder Morgan Bulk Term. T-S Portland

Date: 12-15-08

Date: 12/15/08

Date: 12/15/08

Project: Stormwater

Time: 1345

Initials: JS

Initials: JS

Temperature out of range:

Initials: 425

***ESI Clients (see Section C)

☐ Not enough Ice
☐ No Ice
☐ Ice Melted
☐ W/in 4 Hours
☐ Other: _____

Cooler Temperature (IR): 1.9 °C plastic glass NA (oil/air samples, ESI client)

Digi #1

Digi #2

Temperature Blank: _____ °C

A Custody Seals: (# _____)

Signature: Y N Dated: _____

☒ None

Received from:

☒ TA Courier

☐ Envoy

☐ UPS

☐ Fed Ex

☐ Client

☐ TDP

☐ DHL

☐ SDS

☐ Mid-Valley

☐ GS/TA

☐ GS/Envoy

☐ Other: _____

Container Type:

☒ #Cooler(s)

☐ #Box(s)

☐ None (☐ #Other: _____)

Coolant Type:

☐ Gel Ice

☒ Loose Ice

☐ None

Packing Material:

☐ Bubble Bags

☐ Styrofoam Cubbies

☐ Peanuts

☒ None (☐ Other: _____)

B Sample Status:
(If N circled, see NOD)

General:

Intact? Y N

Containers Match COC? Y N none given

IDs Match COC? Y N

For Analyses Requested:

Cyanide Checked? Y N NA

Correct Type & Preservation? Y N

Adequate Volume? Y N

Within Hold Time? Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace? Y N NA

TB on COC? not provided Y N NA

Metals:

HNO3 Preserved? Y N NA

Dissolved Metals Filtered? Y N NA

C ***ESI Clients Only:

Temperature Blank: _____ °C not provided Digi: # 1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX Goldstreak UPS DHL Other: _____

Project Managers:

Comments: _____

PM Reviewed: _____ (Initial/Date)

KMB00010223

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland

Sampler: Lawrence Spangler

Site: Outfall 001

Project: Stormwater

Date: 12-22-08

Time: 1610

Sample Matrix:

☒ Water ☐ Soil ☐ HW ☐ Chemical ☐ Drinking
☐ Other: _____

Sampling Method:

☐ Comp-Flow ☐ Comp-Time ☒ Grab ☐ Multi-grab

Composite Sampling Equipment:

☐ ISCO #: _____ Comp Samples/day: _____ Start time: _____ Stop time: _____
Sampler calibration: _____

Grab Sampling Equipment:

☒ Dipper ☐ Bucket ☐ Coliwassa tube ☐ Other: _____ Time: _____

Field Data:

pH: 6.98 pH calibration-7.00 buffer reading: 6.96

Temp: _____ Cond: _____ Cl2: _____

Flow-initial: _____ Flow-final: _____

Gallons/day: _____

Field Conditions:

Weather: ☐ Sunny ☐ Partly cloudy ☒ Cloudy ☐ Snowing
Rainfall: ☒ Heavy ☒ Continuous ☐ Intermittent ☐ Light ☐ None

Sample Characteristics:

Color: _____ Odor: _____ TSS: _____

Sediment: _____ Foam: _____

Observations and Comments:

November 24, 2008

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 11/10/08 17:10.
The following list is a summary of the Work Orders contained in this report, generated on 11/24/08 16:56.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PRK0314	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRK0314-01	Water	11/10/08 09:30	11/10/08 17:10

TestAmerica Portland



Brian Cone, Industrial Services Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greene

Report Created:

11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01	(Outfall 001)			Water				Sampled: 11/10/08 09:30		
Oil & Grease	EPA 1664	ND	----	2.36	mg/l	1x	8110644	11/19/08 18:30	11/20/08 15:26	

TestAmerica Portland

Becky L. Cane

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)				Water			Sampled: 11/10/08 09:30			
Copper	EPA 200.8	0.00399	----	0.00200	mg/l	1x	8110574	11/18/08 15:44	11/19/08 00:34	
Lead	"	0.00110	----	0.00100	"	"	"	"	"	
Zinc	"	0.621	----	0.00500	"	"	"	"	"	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)				Water				Sampled: 11/10/08 09:30		
Total Suspended Solids	SM 2540D	32.7	-----	4.08	mg/l	1x	8110518	11/14/08 11:57	11/14/08 16:14	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
11/24/08 16:56

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)				Water			Sampled: 11/10/08 09:30			
pH	EPA 150.1	6.42	-----		pH Units	1x	8110435	11/10/08 09:35	11/10/08 09:40	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110644

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110644-BLK1)										Extracted: 11/19/08 18:00				
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	11/20/08 15:26	
LCS (8110644-BS1)										Extracted: 11/19/08 18:00				
Oil & Grease	EPA 1664	38.2	---		mg/l	1x	--	40.0	95.5%	(78-114)	--	--	11/20/08 15:26	
LCS Dup (8110644-BSD1)										Extracted: 11/19/08 18:00				
Oil & Grease	EPA 1664	38.5	---		mg/l	1x	--	40.0	96.2%	(78-114)	0.782% (18)		11/20/08 15:26	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110574

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110574-BLK1)										Extracted: 11/18/08 15:44				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	11/18/08 23:36	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (8110574-BS1)										Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.101	---	0.00200	mg/l	1x	--	0.100	101%	(85-115)	--	--	11/18/08 23:41	
Lead	"	0.0998	---	0.00100	"	"	--	"	99.8%	"	--	--	"	
Zinc	"	0.0976	---	0.00500	"	"	--	"	97.6%	"	--	--	"	
Duplicate (8110574-DUP1)										QC Source: PRK0313-01 Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.0130	---	0.00200	mg/l	1x	0.0130	--	--	--	0.154% (20)		11/19/08 00:13	
Lead	"	0.00133	---	0.00100	"	"	0.00131	--	--	--	1.14%	"	"	
Zinc	"	0.276	---	0.00500	"	"	0.275	--	--	--	0.435%	"	"	
Matrix Spike (8110574-MS1)										QC Source: PRK0313-01 Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.113	---	0.00200	mg/l	1x	0.0130	0.100	99.7%	(75-125)	--	--	11/19/08 00:23	
Lead	"	0.101	---	0.00100	"	"	0.00131	"	99.8%	"	--	--	"	
Zinc	"	0.371	---	0.00500	"	"	0.275	"	96.0%	(70-130)	--	--	"	
Matrix Spike (8110574-MS2)										QC Source: PRK0328-01 Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.105	---	0.00200	mg/l	1x	0.00593	0.100	99.4%	(75-125)	--	--	11/19/08 01:21	
Lead	"	0.101	---	0.00100	"	"	0.000639	"	100%	"	--	--	"	
Zinc	"	0.213	---	0.00500	"	"	0.119	"	94.4%	(70-130)	--	--	"	

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal S
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greenc

Report Created:

11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110518

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110518-BLK1)										Extracted: 11/14/08 11:57				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	11/14/08 16:14	
LCS (8110518-BS1)										Extracted: 11/14/08 11:57				
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	11/14/08 16:14	
Duplicate (8110518-DUP1)										QC Source: PRK0363-01				
										Extracted: 11/14/08 11:57				
Total Suspended Solids	SM 2540D	76.9	---	7.69	mg/l	1x	76.9	--	--	--	0.00%	(20)	11/14/08 16:14	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

TestAmerica Laboratories, Inc.

Chain of Custody Record

KMB00010235

TestAmerica Sample Receipt Checklist

Cooler ID(s):

Received by:

Unpacked by:

Logged-in by:

Work Order No.

Client:

Project:

(section A)

Date: 11/10/08

Time: 17:10

Initials: JMR

(section B)

Date: 11/10/08

Initials: JMR

Date: 11/10/08

Initials: JMR

PRK0314

Kinder Morgan

stormwater

Temperature out of range:

Digi #1

Digi #2

Temperature Blank: C

Not enough Ice
No Ice
Ice Melted
Win 4 Hours
Other:

***ESI Clients (see Section C)

Cooler Temperature (IR): 3.7 C plastic glass NA (oil/air samples, ESI client)

A Custody Seals: (#)

Signature: Y N Dated:

None

Container Type:

#Cooler(s)

#Box(s)

None (#Other:)

Coolant Type:

Gel Ice

Loose Ice

None

Packing Material:

Bubble Bags

Styrofoam Cubbies

Peanuts

None (#Other:)

Received from:

TA Courier

Senvoy

UPS

Fed Ex

Client

TDP

DHL

SDS

Mid-Valley

GS/TA

GS/Senvoy

Other:

B Sample Status:
(If N circled, see NOD)

General:

Intact?

Y N

Containers Match COC?

Y N

none given

IDs Match COC?

Y N

For Analyses Requested:

Cyanide Checked?

Y N

NA

Correct Type & Preservation?

Y N

Adequate Volume?

Y N

Within Hold Time?

Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace?

Y N

NA

TB on COC? not provided

Y N

NA

Metals:

HNO3 Preserved?

Y N

NA

Dissolved Metals Filtered?

Y N

NA

C ***ESI Clients Only:

Temperature Blank: C not provided Digi: #1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number?

FED EX Goldstreak UPS DHL Other:

Project Managers:

Comments:

PM Reviewed: (Initial/Date)

KMB00010236

Client: Kinder Morgan Bulk Terminals: T5-Portland

Sampler: Lawrence Spangler

Site: Outfall 001

Project: Stormwater

Date: 11-10-08

Time: 0930

Sample Matrix:

☒ Water ☐ Soil ☐ HW ☐ Chemical ☐ Drinking

☐ Other: _____

Sampling Method:

☐ Comp-Flow ☐ Comp-Time ☒ Grab ☐ Multi-grab

Composite Sampling Equipment:

☐ ISCO #: _____ Comp Samples/day: _____ Start time: _____ Stop time: _____

Sampler calibration: _____

Grab Sampling Equipment:

☒ Dipper ☐ Bucket ☐ Coliwassa tube ☐ Other: _____ Time: 0930

Field Data:

pH: 6.42 pH calibration-7.00 buffer reading: 7.04

Temp: _____ Cond: _____ Cl2: _____

Flow-initial: _____ Flow-final: _____

Gallons/day: _____

Field Conditions:

Weather: ☐ Sunny ☐ Partly cloudy ☒ Cloudy ☐ Snowing

Rainfall: ☐ Heavy ☐ Continuous ☐ Intermittent ☒ Light ☐ None

Sample Characteristics:

Color: _____ Odor: _____ TSS: _____

Sediment: _____ Foam: _____

Observations and Comments:

March 30, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 03/16/09 10:45.
The following list is a summary of the Work Orders contained in this report, generated on 03/30/09 15:14.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PSC0443	Stormwater	NA

TestAmerica Portland



Darrell Auil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSC0443-01	Water	03/14/09 17:15	03/16/09 10:45
Culvert	PSC0443-02	Water	03/14/09 17:10	03/16/09 10:45

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)				Water			Sampled: 03/14/09 17:15			
Oil & Grease	EPA 1664	ND	----	4.76	mg/l	1x	9030895	03/27/09 15:00	03/30/09 07:55	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)		Water				Sampled: 03/14/09 17:15				
Copper	EPA 200.8	0.00720	-----	0.00200	mg/l	1x	9030564	03/18/09 11:28	03/21/09 05:46	
Lead	"	0.00135	-----	0.00100	"	"	"	"	"	
Zinc	"	0.261	-----	0.00500	"	"	"	"	"	
PSC0443-02 (Culvert)		Water				Sampled: 03/14/09 17:10				
Copper	EPA 200.8	0.0103	-----	0.00200	mg/l	1x	9030564	03/18/09 11:28	03/21/09 06:00	
Lead	"	0.00195	-----	0.00100	"	"	"	"	"	
Zinc	"	0.295	-----	0.00500	"	"	"	"	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**


Report Created:
03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02 (Culvert)		Water				Sampled: 03/14/09 17:10				
Copper	EPA 200.8	0.00535	---	0.00200	mg/l	1x	9030756	03/24/09 11:38	03/25/09 22:24	
Lead	"	ND	---	0.00100	"	"	"	"	"	
Zinc	"	0.107	---	0.00500	"	"	"	"	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)		Water				Sampled: 03/14/09 17:15				
Total Suspended Solids	SM 2540D	20.0	-----	10.0	mg/l	1x	9030578	03/18/09 14:00	03/18/09 17:34	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
03/30/09 15:14

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)				Water			Sampled: 03/14/09 17:15			
pH	EPA 150.1	7.19	----		pH Units	1x	9030675	03/14/09 17:20	03/14/09 17:25	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Lab Filtration
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02 (Culvert)				Water			Sampled: 03/14/09 17:10			
Lab Filtration	NCA SOP	ND	----	1.00	N/A	1x	9030482	03/16/09 17:41	03/16/09 18:31	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030895

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030895-BLK1)										Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	03/30/09 07:55	
LCS (9030895-BS1)										Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	35.9	---		mg/l	1x	--	40.1	89.5%	(78-114)	--	--	03/30/09 07:55	
Matrix Spike (9030895-MS1)										QC Source: PSC0439-01 Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	25.4	---		mg/l	1x	0.385	40.1	62.4%	(78-114)	--	--	03/30/09 07:55	M8
Matrix Spike Dup (9030895-MSD1)										QC Source: PSC0439-01 Extracted: 03/27/09 14:15				
Oil & Grease	EPA 1664	29.2	---		mg/l	1x	0.385	40.1	71.9%	(78-114)	13.9%	(18)	03/30/09 07:55	M8

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica.Portland

QC Batch: 9030564

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030564-BLK1)										Extracted: 03/18/09 11:28				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	03/21/09 03:50	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9030564-BS1)										Extracted: 03/18/09 11:28				
Copper	EPA 200.8	0.0968	---	0.00200	mg/l	1x	--	0.100	96.8%	(85-115)	--	--	03/21/09 03:58	
Lead	"	0.0906	---	0.00100	"	"	--	"	90.6%	"	--	--	"	
Zinc	"	0.0866	---	0.00500	"	"	--	"	86.6%	"	--	--	"	
Duplicate (9030564-DUP1)										QC Source: PSC0426-01 Extracted: 03/18/09 11:28				
Copper	EPA 200.8	1.35	---	0.0100	mg/l	5x	1.43	--	--	--	5.48%	(20)	03/21/09 04:41	
Lead	"	ND	---	0.00500	"	"	ND	--	--	--	11.4%	"	"	
Zinc	"	0.0516	---	0.0250	"	"	0.0564	--	--	--	8.70%	"	"	
Matrix Spike (9030564-MS1)										QC Source: PSC0426-01 Extracted: 03/18/09 11:28				
Copper	EPA 200.8	1.51	---	0.0100	mg/l	5x	1.43	0.100	83.5%	(75-125)	--	--	03/21/09 04:48	
Lead	"	0.0922	---	0.00500	"	"	0.00370	"	88.6%	"	--	--	"	
Zinc	"	0.148	---	0.0250	"	"	0.0564	"	91.8%	(70-130)	--	--	"	
Matrix Spike (9030564-MS2)										QC Source: PSC0443-01 Extracted: 03/18/09 11:28				
Copper	EPA 200.8	0.0958	---	0.00200	mg/l	1x	0.00720	0.100	88.6%	(75-125)	--	--	03/21/09 05:53	
Lead	"	0.0835	---	0.00100	"	"	0.00135	"	82.1%	"	--	--	"	
Zinc	"	0.338	---	0.00500	"	"	0.261	"	76.9%	(70-130)	--	--	"	

TestAmerica Portland



Darrell Auil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030756

Water Preparation Method: EPA 200/3005 Diss

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030756-BLK1)										Extracted: 03/24/09 11:38				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	03/25/09 22:13	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (9030756-BS1)										Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.0943	---	0.00200	mg/l	1x	--	0.100	94.3%	(85-115)	--	--	03/25/09 22:19	
Lead	"	0.103	---	0.00100	"	"	--	"	103%	"	--	--	"	
Zinc	"	0.101	---	0.00500	"	"	--	"	101%	"	--	--	"	
Duplicate (9030756-DUP1)										QC Source: PSC0443-02 Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.00530	---	0.00200	mg/l	1x	0.00535	--	--	--	0.845%	(20)	03/25/09 22:29	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	0.106	---	0.00500	"	"	0.107	--	--	--	1.22%	"	"	
Matrix Spike (9030756-MS1)										QC Source: PSC0444-01 Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.103	---	0.00200	mg/l	1x	0.0106	0.100	92.1%	(70-130)	--	--	03/25/09 22:45	
Lead	"	0.101	---	0.00100	"	"	0.000935	"	99.7%	"	--	--	"	
Zinc	"	0.208	---	0.00500	"	"	0.109	"	98.8%	"	--	--	"	
Matrix Spike (9030756-MS2)										QC Source: PSC0573-02 Extracted: 03/24/09 11:38				
Copper	EPA 200.8	0.110	---	0.00200	mg/l	1x	0.0200	0.100	90.4%	(70-130)	--	--	03/25/09 23:50	
Lead	"	0.100	---	0.00100	"	"	0.000243	"	99.7%	"	--	--	"	
Zinc	"	0.645	---	0.00500	"	"	0.553	"	92.1%	"	--	--	"	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030578

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030578-BLK1)										Extracted: 03/18/09 14:00				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	03/18/09 17:34	
LCS (9030578-BS1)										Extracted: 03/18/09 14:00				
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	03/18/09 17:34	
Duplicate (9030578-DUP1)										QC Source: PSC0445-01				
										Extracted: 03/18/09 14:00				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	ND	--	--	--	NR	(20)	03/18/09 17:34	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**

Report Created:
03/30/09 15:14

Lab Filtration - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030482

Water Preparation Method: Lab Filter

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030482-BLK1)										Extracted: 03/16/09 17:41				
Lab Filtration	NCA SOP	ND	---	1.00	N/A	1x	--	--	--	--	--	--	03/16/09 18:31	

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
03/30/09 15:14

Notes and Definitions

Report Specific Notes:

M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Darrell Auvil For Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

TestAmerica

[illegible]

TestAmerica

LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland

Sampler: Lawrence Spangler

Site: Outfall 001

Project: Stormwater

Date: 03-14-09

Time: 1705

Sample Matrix:

☒ Water

☐ Soil

☐ HW

☐ Chemical

☐ Drinking

Sampling Method:

Grab

Grab Sampling Equipment:

Dipper

Time: 1710, 1715

Field Data:

pH: 7.19

pH calibration-7.00 buffer reading: 7.05

pH calibration slope: 99.3

Field Conditions:

Weather: ☐ Sunny

☐ Partly cloudy

☒ Cloudy

☐ Snowing

Rainfall: ☐ Heavy

☒ Continuous

☐ Intermittent

☒ Light

☐ None

Sample Characteristics:

Color: _____

Odor: _____

TSS: _____

Sediment: _____

Foam: _____

Observations and Comments:

TestAmerica Portland Sample Receiving Checklist

Work Order #: RSC 0443 Date/Time Received: 03-16-09 1045
Client Name and Project: Kinder Morgan STORMWATER

PM to Complete This Section: Yes No
Residual Chlorine Check Required: ☐ ☐ Quarantined: ☐ ☐
Quote #:
Special Instructions:

Time Zone:
☐ EDT/EST ☐ CDT/CST ☐ MDT/MST ☐ PDT/PST ☐ OTHER

Unpacking Checks: **Temperature out of Range:**
Cooler #(s): 1
Temperatures: 0.1c
Digi #1 ☐ Digi #2 ☐ IR Gun ☒ (☐ Plastic ☒ Glass)
Not enough or No Ice
Ice Melted
W/in 4 Hrs of collection
Other:

- N/A Yes No Initials: PM
- ☒ ☐ ☐ 1. If ESI client, were temp blanks received? If no, document on NOD.
 - ☒ ☐ ☐ 2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
 - ☒ ☐ ☐ 3. Chain of Custody present? If no, document on NOD.
 - ☒ ☐ ☐ 4. Bottles received intact? If no, document on NOD.
 - ☒ ☐ ☐ 5. Sample is not multiphasic? If no, document on NOD.
 - ☒ ☐ ☐ 6. Proper Container and preservatives used? If no, document on NOD.
 - ☐ ☒ ☐ 7. pH of all samples checked and meet requirements? If no, document on NOD.
 - ☒ ☐ ☐ 8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
 - ☒ ☐ ☐ 9. HF Dilution required?
 - ☒ ☐ ☐ 10. Sufficient volume provided for all analysis? If no, document on NOD and consult PM before proceeding.
 - ☒ ☐ ☐ 11. Did chain of custody agree with samples received? If no, document on NOD.
 - ☒ ☐ ☐ 12. Were VOA/Oil Syringe samples without headspace?
 - ☒ ☐ ☐ 13. Were VOA vials preserved? ☐ HCL ☐ Sodium Thiosulfate ☐ Ascorbic Acid
 - ☐ ☒ ☐ 14. Did samples require preservation with sodium thiosulfate?
 - ☒ ☐ ☐ 15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
 - ☒ ☒ ☐ 16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
 - ☒ ☐ ☐ 17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM before proceeding.
 - ☒ ☐ ☐ 18. Are analyses with short holding times received in hold?
 - ☒ ☐ ☐ 19. Was Standard Turn Around (TAT) requested?
 - ☒ ☐ ☐ 20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

TestAmerica Portland
Sample Receiving Checklist

Work Order #: PSC0443

Login Checks:

Initials: K

N/A Yes No

- | | | | |
|-------------------------------------|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. Sufficient volume provided for all analysis? If no, document on NOD & contact PM. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 22. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If no, document on NOD and contact PM. |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 23. Did the chain of custody include "received by" and "relinquished by" signatures, dates and times? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24. Were special log in instructions read and followed? |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 25. Were tests logged checked against the COC? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26. Were rush notices printed and delivered? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 27. Were short hold notices printed and delivered? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 28. Were subcontract COCs printed? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 29. Was HF dilution logged? |

Labeling and Storage Checks:

Initials: pm

N/A Yes No

- | | | | |
|-------------------------------------|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 30. Were the subcontracted samples/containers put in Sx fridge? |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31. Were sample bottles and COC double checked for dissolved/filtered metals? |
| | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 32. Did the sample ID, Date, and Time from label match what was logged? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 33. Were Foreign sample stickers affixed to each container and containers stored in foreign fridge? |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 34. Were HF stickers affixed to each container, and containers stored in Sx fridge? |

Document any problems or discrepancies and the actions taken to resolve them on a Notice of Discrepancy form (NOD).

February 17, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 02/11/09 13:45.
The following list is a summary of the Work Orders contained in this report, generated on 02/17/09 16:22.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PSB0312	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**

Report Created:
02/17/09 16:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSB0312-01	Water	02/10/09 13:30	02/11/09 13:45
Pond	PSB0312-02	Water	02/10/09 13:45	02/11/09 13:45
Culvert	PSB0312-03	Water	02/10/09 13:25	02/11/09 13:45

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**

Report Created:
02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01 (Outfall 001)				Water				Sampled: 02/10/09 13:30		
Oil & Grease	EPA 1664	ND	—	2.36	mg/l	1x	9020400	02/12/09 15:17	02/16/09 20:11	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greenc**

Report Created:
02/17/09 16:22

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01 (Outfall 001)		Water				Sampled: 02/10/09 13:30				
Copper	EPA 200.8	ND	—	0.00200	mg/l	1x	9020373	02/12/09 09:12	02/13/09 00:05	
Lead	"	ND	—	0.00100	"	"	"	"	"	
Zinc	"	0.209	—	0.00500	"	"	"	"	"	
PSB0312-02 (Pond)		Water				Sampled: 02/10/09 13:45				
Zinc	EPA 200.8	ND	—	0.00500	mg/l	1x	9020373	02/12/09 09:12	02/13/09 00:12	
PSB0312-03 (Culvent)		Water				Sampled: 02/10/09 13:25				
Zinc	EPA 200.8	4.31	—	0.0500	mg/l	10x	9020373	02/12/09 09:12	02/13/09 00:55	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
02/17/09 16:22

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01 (Outfall 001)				Water				Sampled: 02/10/09 13:30		
pH	EPA 150.1	6.86	—		pH Units	1x	9020389	02/10/09 13:35	02/10/09 13:40	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**

Report Created:
02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results
TestAmerica Portland

QC Batch: 9020400 Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9020400-BLK1)										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	ND	—	5.00	mg/l	1x	—	—	—	—	—	—	02/16/09 16:45	
LCS (9020400-BS1)										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	35.8	—		mg/l	1x	—	40.0	89.5%	(78-114)	—	—	02/16/09 16:45	
Matrix Spike (9020400-MS1)										QC Source: PSB0128-04				
										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	24.4	—		mg/l	1x	0.490	40.0	59.8%	(78-114)	—	—	02/16/09 16:45	M8
Matrix Spike Dup (9020400-MSD1)										QC Source: PSB0128-04				
										Extracted: 02/12/09 15:17				
Oil & Grease	EPA 1664	31.6	—		mg/l	1x	0.490	40.0	77.8%	(78-114)	25.7%	(18)	02/16/09 16:45	M8

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greene**

Report Created:
02/17/09 16:22

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results
TestAmerica Portland

QC Batch: 9020373 Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9020373-BLK1)														
Extracted: 02/12/09 09:12														
Copper	EPA 200.8	ND	—	0.00200	mg/l	1x	—	—	—	—	—	—	02/12/09 20:57	
Lead	"	ND	—	0.00100	"	"	—	—	—	—	—	—	"	
Zinc	"	ND	—	0.00500	"	"	—	—	—	—	—	—	"	
LCS (9020373-BS1)														
Extracted: 02/12/09 09:12														
Copper	EPA 200.8	0.101	—	0.00200	mg/l	1x	—	0.100	101%	(85-115)	—	—	02/12/09 21:04	
Lead	"	0.0980	—	0.00100	"	"	—	"	98.0%	"	—	—	"	
Zinc	"	0.0983	—	0.00500	"	"	—	"	98.3%	"	—	—	"	
Duplicate (9020373-DUP1)														
QC Source: PSB0162-06														
Extracted: 02/12/09 09:12														
Copper	EPA 200.8	ND	—	0.00200	mg/l	1x	ND	—	—	—	NR	(20)	02/12/09 21:19	
Lead	"	ND	—	0.00100	"	"	ND	—	—	—	9.93%	"	"	
Zinc	"	ND	—	0.00500	"	"	ND	—	—	—	0.434%	"	"	
Matrix Spike (9020373-MS1)														
QC Source: PSB0204-04														
Extracted: 02/12/09 09:12														
Copper	EPA 200.8	0.0960	—	0.00200	mg/l	1x	0.000680	0.100	95.3%	(75-125)	—	—	02/12/09 21:48	
Lead	"	0.0964	—	0.00100	"	"	ND	"	96.4%	"	—	—	"	
Zinc	"	0.100	—	0.00500	"	"	0.00257	"	97.8%	(70-130)	—	—	"	
Matrix Spike (9020373-MS2)														
QC Source: PSB0207-02														
Extracted: 02/12/09 09:12														
Copper	EPA 200.8	1.02	—	0.0200	mg/l	10x	0.906	0.100	114%	(75-125)	—	—	02/13/09 00:48	
Lead	"	0.0891	—	0.00100	"	1x	0.00559	"	83.5%	"	—	—	02/12/09 22:31	
Zinc	"	2.85	—	0.0500	"	10x	2.69	"	159%	(70-130)	—	—	02/13/09 00:48	MHA

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: Stormwater

Project Number: NA

Project Manager: Katrina Greene

Report Created:

02/17/09 16:22

Notes and Definitions

Report Specific Notes:

- M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).
- MHA - Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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phone 503.906.9200 fax 503.906.9210

Chain of Custody Record

TestAmerica

TestAmerica Laboratories, Inc.

[illegible]

TestAmerica Sample Receipt Checklist

Received by:

Unpacked by:

Logged-in by:

Work Order No.

(section A)

(section B)

Date: 02-11-07

Date: 2/11/09

Date: 2/11/09

Client: Kinder Morgan

Time: 1:45

Initials: [Signature]

Initials: [Signature]

Project: Stormwater

Initials: [Signature]

Temperature out of range.

***ESI Clients (see Section C)

Cooler Temperature (IR): 1.2 °C plastic glass NA (oil/air samples, ESI client)

Digi #1

Digi #2

Temperature Blank: °C

Not enough Ice
No Ice
Ice Melted
W/in 4 Hours
Other:

A

Custody Seals: (#)

Signature: Y N Dated:

X None

Container Type:

X #Cooler(s)

#Box(s)

None (#Other:)

Coolant Type:

Gel Ice

X Loose Ice

None

Packing Material:

Bubble Bags

Styrofoam Cubbles

Peanuts

X None (#Other:)

Received from:

X TA Courier

Senvoy

UPS

Fed Ex

Client

TDP

DHL

SPS

Mid-Valley

GS/TA

GS/Senvoy

Other:

B

Sample Status:

(If N circled, see NOD)

General:

Intact?

Y N

Containers Match COC?

Y N

none given

IDs Match COC?

Y N

For Analyses Requested:

Cyanide Checked?

Y N

NA

Correct Type & Preservation?

Y N

Adequate Volume?

Y N

Within Hold Time?

Y N

HF Dilution Required?

Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace?

Y N

NA

TB on COC? not provided

Y N

NA

Metals:

HNO3 Preserved?

Y N

NA

Dissolved Metals Filtered?

Y N

NA

C

***ESI Clients Only:

Temperature Blank: °C not provided Digi: #1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number?

FED EX Goldstreak UPS DHL Other

Project Managers:

Comments:

PM Reviewed: (Initial/Date)

KMB00010265

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland

Sampler: Lawrence Spangler

Site: Outfall 001

Project: Stormwater

Date: 02-10-09

Time: 1330

Sample Matrix:

Water

☐ Soil

☐ HW

☐ Chemical

☐ Drinking

Sampling Method:

Grab

Grab Sampling Equipment:

Dipper

Time: 1330

pond 1345 culvert 1325

Field Data:

pH: 6.8k

pH calibration-7.00 buffer reading: 7.05

Field Conditions:

Weather: ☐ Sunny

☐ Partly cloudy

☒ Cloudy

☐ Snowing

Rainfall: ☒ Heavy

☒ Continuous

☐ Intermittent

☐ Light

☐ None

Sample Characteristics:

Color: _____

Odor: _____

TSS: _____

Sediment: _____

Foam: _____

Observations and Comments:

Revision #0 8/19/08

KMB00010266

January 03, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 12/15/08 13:45.
The following list is a summary of the Work Orders contained in this report, generated on 01/03/09 16:03.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PRL0504	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
01/03/09 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRL0504-01	Water	12/12/08 16:10	12/15/08 13:45

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)				Water			Sampled: 12/12/08 16:10			
Oil & Grease	EPA 1664	ND	----	2.36	mg/l	1x	8120852	12/31/08 16:45	01/01/09 15:50	

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Report Created:
01/03/09 16:03

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)			Water				Sampled: 12/12/08 16:10		
Copper	EPA 200.8	0.0188	----	0.00200	mg/l	1x	8120644	12/18/08 14:05	12/19/08 01:20	
Lead	"	0.00570	----	0.00100	"	"	"	"	"	
Zinc	"	1.02	----	0.0500	"	10x	"	"	12/19/08 15:32	

Bea. L. Cove

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Grcenc

Report Created:
01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)				Water			Sampled: 12/12/08 16:10			
Total Suspended Solids	SM 2540D	64.0	-----	4.00	mg/l	1x	8120673	12/19/08 11:02	12/19/08 13:15	

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Grcenc

Report Created:
01/03/09 16:03

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)				Water		Sampled: 12/12/08 16:10				
pH	EPA 150.1	6.48	-----		pH Units	1x	8120597	12/12/08 16:15	12/12/08 16:20	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greenc**

Report Created:
01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: **8120852**

Water Preparation Method: **O&G prep CE**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120852-BLK1)										Extracted: 12/31/08 14:00				
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	01/01/09 15:50	
LCS (8120852-BS1)										Extracted: 12/31/08 14:00				
Oil & Grease	EPA 1664	35.1	---		mg/l	1x	--	40.0	87.8%	(78-114)	--	--	01/01/09 15:50	
Matrix Spike (8120852-MS1)										QC Source: PRL0495-01 Extracted: 12/31/08 14:00				
Oil & Grease	EPA 1664	34.3	---		mg/l	1x	1.62	40.0	81.7%	(78-114)	--	--	01/01/09 15:50	
Matrix Spike (8120852-MS2)										QC Source: PRL0527-01 Extracted: 12/31/08 14:00				
Oil & Grease	EPA 1664	29.4	---		mg/l	1x	23.6	40.0	14.5%	(78-114)	--	--	01/01/09 15:50	MHA

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal S
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Grecne

Report Created:
01/03/09 16:03

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8120644

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120644-BLK1)										Extracted: 12/18/08 14:05				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	12/18/08 23:56	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (8120644-BS1)										Extracted: 12/18/08 14:05				
Copper	EPA 200.8	0.0970	---	0.00200	mg/l	1x	--	0.100	97.0%	(85-115)	--	--	12/19/08 00:01	
Lead	"	0.0902	---	0.00100	"	"	--	"	90.2%	"	--	--	"	
Zinc	"	0.0938	---	0.00500	"	"	--	"	93.8%	"	--	--	"	
Duplicate (8120644-DUP1)										QC Source: PRL0496-01 Extracted: 12/18/08 14:05				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	ND	--	--	--	5.88%	(20)	12/19/08 00:12	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	4.51%	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	2.22%	"	"	
Matrix Spike (8120644-MS1)										QC Source: PRL0496-02 Extracted: 12/18/08 14:05				
Copper	EPA 200.8	0.0980	---	0.00200	mg/l	1x	0.00201	0.100	96.0%	(75-125)	--	--	12/19/08 00:22	
Lead	"	0.0875	---	0.00100	"	"	0.000284	"	87.2%	"	--	--	"	
Zinc	"	0.0972	---	0.00500	"	"	0.00241	"	94.8%	(70-130)	--	--	"	
Matrix Spike (8120644-MS2)										QC Source: PRL0504-01 Extracted: 12/18/08 14:05				
Copper	EPA 200.8	0.112	---	0.00200	mg/l	1x	0.0188	0.100	93.0%	(75-125)	--	--	12/19/08 01:25	
Lead	"	0.0886	---	0.00100	"	"	0.00570	"	82.9%	"	--	--	"	
Zinc	"	1.11	---	0.0500	"	10x	1.02	"	87.0%	(70-130)	--	--	12/19/08 15:38	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8120673

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120673-BLK1)										Extracted: 12/19/08 11:02				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	12/19/08 13:15	
LCS (8120673-BS1)										Extracted: 12/19/08 11:02				
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	12/19/08 13:15	
Duplicate (8120673-DUP1)										QC Source: PRL0584-01 Extracted: 12/19/08 11:02				
Total Suspended Solids	SM 2540D	20.0	---	10.0	mg/l	1x	20.0	--	--	--	0.00%	(20)	12/19/08 13:15	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
01/03/09 16:03

Notes and DefinitionsReport Specific Notes:

- MHA - Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

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9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

PRL0504

TestAmerica

TESTAMERICA

[illegible]

TestAmerica Sample Receipt Checklist

Received by:

Unpacked by:

Logged-in by:

Work Order No. PRLO504

(section A)

(section B)

Date: 12-15-08

Date: 12/15/08

Date: 12/15/08

Client: Kinder Morgan Bulk Term. T-S Portland

Time: 1345

Initials: 34

Initials: 34

Project: Stormwater

Temperature out of range:

***ESI Clients (see Section C)

Cooler Temperature (IR): 1.9 °C plastic glass NA (oil/air samples, ESI client)

Digi #1

Digi #2

Temperature Blank: _____ °C

☐ Not enough Ice
☐ No Ice
☐ Ice Melted
☐ W/in 4 Hours
☐ Other: _____

A

Custody Seals: (# _____)

Signature: Y N Dated: _____

☒ None

Received from:

☒ TA Courier

____ Envoy

____ UPS

____ Fed Ex

____ Client

____ TDP

____ DHL

____ SDS

____ Mid-Valley

____ GS/TA

____ GS/Envoy

____ Other: _____

Container Type:

☒ #Cooler(s)

____ #Box(s)

____ None (____ #Other: _____)

Coolant Type:

____ Gel Ice

☒ Loose Ice

____ None

Packing Material:

____ Bubble Bags

____ Styrofoam Cubbies

____ Peanuts

☒ None (____ Other: _____)

B

Sample Status:
(If N circled, see NOD)

General:

Intact? Y N

Containers Match COC? Y N none given

IDs Match COC? Y N

For Analyses Requested:

Cyanide Checked? Y N NA

Correct Type & Preservation? Y N

Adequate Volume? Y N

Within Hold Time? Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace? Y N NA

TB on COC? not provided Y N NA

Metals:

HNO3 Preserved? Y N NA

Dissolved Metals Filtered? Y N NA

C

***ESI Clients Only:

Temperature Blank: _____ °C not provided Digi: # 1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX Goldstreak UPS DHL Other: _____

Project Managers:

Comments: _____

PM Reviewed: _____ (Initial/Date)

KMB00010278



THE LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland	
Sampler: Lawrence Spangler	
Site: Outfall 001	Date: 12-22-08
Project: Stormwater	Time: 1610

Sample Matrix:				
<input checked="" type="checkbox"/> Water	<input type="checkbox"/> Soil	<input type="checkbox"/> HW	<input type="checkbox"/> Chemical	<input type="checkbox"/> Drinking
<input type="checkbox"/> Other: _____				

Sampling Method:			
<input type="checkbox"/> Comp-Flow	<input type="checkbox"/> Comp-Time	<input checked="" type="checkbox"/> Grab	<input type="checkbox"/> Multi-grab

Composite Sampling Equipment:			
<input type="checkbox"/> ISCO #:	Comp Samples/day:	Start time:	Stop time:
Sampler calibration: _____			

Grab Sampling Equipment:			
<input checked="" type="checkbox"/> Dipper	<input type="checkbox"/> Bucket	<input type="checkbox"/> Coliwassa tube	<input type="checkbox"/> Other: _____ Time: _____

Field Data:			
pH: 6.48	pH calibration-7.00 buffer reading: 6.96		
Temp: _____	Cond: _____	Cl2: _____	
Flow-initial: _____	Flow-final: _____		
Gallons/day: _____			

Field Conditions:			
Weather:	<input type="checkbox"/> Sunny	<input type="checkbox"/> Partly cloudy	<input checked="" type="checkbox"/> Cloudy
Rainfall:	<input checked="" type="checkbox"/> Heavy	<input checked="" type="checkbox"/> Continuous	<input type="checkbox"/> Intermittent
			<input type="checkbox"/> Light
			<input type="checkbox"/> None

Sample Characteristics:			
Color: _____	Odor: _____	TSS: _____	
Sediment: _____	Foam: _____		

Observations and Comments:

November 24, 2008

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 11/10/08 17:10.
The following list is a summary of the Work Orders contained in this report, generated on 11/24/08 16:56.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PRK0314	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
11/24/08 16:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRK0314-01	Water	11/10/08 09:30	11/10/08 17:10

TestAmerica Portland



Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)				Water			Sampled: 11/10/08 09:30			
Oil & Grease	EPA 1664	ND	-----	2.36	mg/l	1x	8110644	11/19/08 18:30	11/20/08 15:26	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
11/24/08 16:56

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)		Water			Sampled: 11/10/08 09:30					
Copper	EPA 200.8	0.00399	-----	0.00200	mg/l	1x	8110574	11/18/08 15:44	11/19/08 00:34	
Lead	"	0.00110	-----	0.00100	"	"	"	"	"	
Zinc	"	0.621	-----	0.00500	"	"	"	"	"	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal S
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)		Water		Sampled: 11/10/08 09:30						
Total Suspended Solids	SM 2540D	32.7	-----	4.08	mg/l	1x	8110518	11/14/08 11:57	11/14/08 16:14	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)				Water			Sampled: 11/10/08 09:30			
pH	EPA 150.1	6.42	-----		pH Units	1x	8110435	11/10/08 09:35	11/10/08 09:40	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110644

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110644-BLK1)										Extracted: 11/19/08 18:00				
Oil & Grease	EPA 1664	ND	---	5.00	mg/l	1x	--	--	--	--	--	--	11/20/08 15:26	
LCS (8110644-BS1)										Extracted: 11/19/08 18:00				
Oil & Grease	EPA 1664	38.2	---		mg/l	1x	--	40.0	95.5%	(78-114)	--	--	11/20/08 15:26	
LCS Dup (8110644-BSD1)										Extracted: 11/19/08 18:00				
Oil & Grease	EPA 1664	38.5	---		mg/l	1x	--	40.0	96.2%	(78-114)	0.782%	(18)	11/20/08 15:26	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: **NA**
Project Manager: **Katrina Greenc**

Report Created:
11/24/08 16:56

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110574

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110574-BLK1)										Extracted: 11/18/08 15:44				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	11/18/08 23:36	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (8110574-BS1)										Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.101	---	0.00200	mg/l	1x	--	0.100	101%	(85-115)	--	--	11/18/08 23:41	
Lead	"	0.0998	---	0.00100	"	"	--	"	99.8%	"	--	--	"	
Zinc	"	0.0976	---	0.00500	"	"	--	"	97.6%	"	--	--	"	
Duplicate (8110574-DUP1)										QC Source: PRK0313-01 Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.0130	---	0.00200	mg/l	1x	0.0130	--	--	--	0.154% (20)	--	11/19/08 00:13	
Lead	"	0.00133	---	0.00100	"	"	0.00131	--	--	--	1.14%	"	"	
Zinc	"	0.276	---	0.00500	"	"	0.275	--	--	--	0.435%	"	"	
Matrix Spike (8110574-MS1)										QC Source: PRK0313-01 Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.113	---	0.00200	mg/l	1x	0.0130	0.100	99.7%	(75-125)	--	--	11/19/08 00:23	
Lead	"	0.101	---	0.00100	"	"	0.00131	"	99.8%	"	--	--	"	
Zinc	"	0.371	---	0.00500	"	"	0.275	"	96.0%	(70-130)	--	--	"	
Matrix Spike (8110574-MS2)										QC Source: PRK0328-01 Extracted: 11/18/08 15:44				
Copper	EPA 200.8	0.105	---	0.00200	mg/l	1x	0.00593	0.100	99.4%	(75-125)	--	--	11/19/08 01:21	
Lead	"	0.101	---	0.00100	"	"	0.000639	"	100%	"	--	--	"	
Zinc	"	0.213	---	0.00500	"	"	0.119	"	94.4%	(70-130)	--	--	"	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 8110518

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8110518-BLK1)										Extracted: 11/14/08 11:57				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	11/14/08 16:14	
LCS (8110518-BS1)										Extracted: 11/14/08 11:57				
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	11/14/08 16:14	
Duplicate (8110518-DUP1)										QC Source: PRK0363-01				
										Extracted: 11/14/08 11:57				
Total Suspended Solids	SM 2540D	76.9	---	7.69	mg/l	1x	76.9	--	--	--	0.00%	(20)	11/14/08 16:14	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
11/24/08 16:56

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

9405 SW Nimbus Avenue

phone 503.906.9200 fax 503.906.9210

TestAmerica Laboratories, Inc.

Chain of Custody Record

KMB00010290

TestAmerica Sample Receipt Checklist

Cooler ID(s):

Received by:

Unpacked by:

Logged-in by:

Work Order No.

(section A)

(section B)

Date: 11/10/08

Date: 11/10/08

Date: 11/10/08

Time: 17:10

Initials: [Signature]

Initials: [Signature]

Initials: [Signature]

Client: Kinder Morgan

Project: stormwater

Temperature out of range:

***ESI Clients (see Section C)

Digi #1

Digi #2

Temperature Blank: °C

Cooler Temperature (IR): 3.7 °C plastic glass NA (oil/air samples, ESI client)

Not enough Ice
No Ice
Ice Melted
W/in 4 Hours
Other:

A

Custody Seals: (#)

Signature: Y N Dated:

None

Container Type:

#Cooler(s)

#Box(s)

None (#Other:)

Coolant Type:

Gel Ice

Loose Ice

None

Packing Material:

Bubble Bags

Styrofoam Cubbies

Peanuts

None (#Other:)

Received from:

TA Courier

Senvoy

UPS

Fed Ex

Client

TDP

DHL

SDS

Mid-Valley

GS/TA

GS/Senvoy

Other:

B

Sample Status:
(If N circled, see NOD)

General:

Intact?

Y N

Containers Match COC?

Y N

none given

IDs Match COC?

Y N

For Analyses Requested:

Cyanide Checked?

Y N

NA

Correct Type & Preservation?

Y N

Adequate Volume?

Y N

Within Hold Time?

Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace?

Y N

NA

TB on COC? not provided

Y N

NA

Metals:

HNO3 Preserved?

Y N

NA

Dissolved Metals Filtered?

Y N

NA

C

***ESI Clients Only:

Temperature Blank: °C not provided Digi: #1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number?

FED EX Goldstreak UPS DHL Other:

Project Managers:

Comments:

PM Reviewed: (Initial/Date)

KMB00010291

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Portland	
Sampler: Lawrence Spangler	
Site: Outfall 001	Date: 11-10-08
Project: Stormwater	Time: 0930

Sample Matrix:	
<input checked="" type="checkbox"/> Water	<input type="checkbox"/> Soil
<input type="checkbox"/> Other:	<input type="checkbox"/> HW
	<input type="checkbox"/> Chemical
	<input type="checkbox"/> Drinking

Sampling Method:	
<input type="checkbox"/> Comp-Flow	<input type="checkbox"/> Comp-Time
<input checked="" type="checkbox"/> Grab	<input type="checkbox"/> Multi-grab

Composite Sampling Equipment:	
<input type="checkbox"/> ISCO #: _____	Comp Samples/day: _____
Start time: _____	Stop time: _____
Sampler calibration: _____	

Grab Sampling Equipment:	
<input checked="" type="checkbox"/> Dipper	<input type="checkbox"/> Bucket
<input type="checkbox"/> Coliwassa tube	<input type="checkbox"/> Other: _____
Time: 0930	

Field Data:	
pH: 6.42	pH calibration-7.00 buffer reading: 7.04
Temp: _____	Cond: _____
Flow-initial: _____	Cl2: _____
Gallons/day: _____	Flow-final: _____

Field Conditions:	
Weather:	<input type="checkbox"/> Sunny
<input type="checkbox"/> Partly cloudy	<input checked="" type="checkbox"/> Cloudy
<input type="checkbox"/> Snowing	
Rainfall:	<input type="checkbox"/> Heavy
<input type="checkbox"/> Continuous	<input type="checkbox"/> Intermittent
<input checked="" type="checkbox"/> Light	<input type="checkbox"/> None

Sample Characteristics:	
Color: _____	Odor: _____
TSS: _____	
Sediment: _____	Foam: _____

Observations and Comments:	

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF June 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Clear	WSTO	/		/		/		/		
2	KM	Rain	BLTA	/		/		/		/		
3	KM	Cloudy	N/A	/		/		/		/		
4	KM	Cloudy	N/A	/		/		/		/		
5	MH	Cloudy	N/A	/		/		/		/		
6	MH	Clear	N/A	/		/		/		/		
7	MH	Cloudy	N/A	/		/		/		/		
8	KM	Cloudy	N/A	/		/		/		/		
9	KM	Clear	N/A	/		/		/		/		
10	KM	Cloudy	N/A	/		/		/		/		
11	KM	Cloudy	N/A	/		/		/		/		
12	MH	Cloudy	N/A	/		/		/		/		
13	MH	Cloudy	N/A	/		/		/		/		
14	MH	Cloudy	N/A	/		/		/		/		
15	KM	Cloudy	N/A	/		/		/		/		

Routing: Please check box when reviewed

☐ 1. Terminal Manager

☐ 2. Assistant

Distribution:

☐ Original to File

☐ Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF June 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	Cloudy	N/A	/		/		/		/		
17	KM	PCloudy	N/A	/		/		/		/		
18	KM	Cloudy	N/A	/		/		/		/		
19	MH	Cloudy	7275	/		/		/		/		
20	MH	Cloudy	7/1m	/		/		/		/		
21	MH	PCloudy	N/A	/		/		/		/		
22	KM	Cloudy	N/A	/		/		/		/		
23	KM	Clear	N/A	/		/		/		/		
24	KM	Clear	N/A	/		/		/		/		
25	KM	Cloudy	N/A	/		/		/		/		
26	MH	Clear	N/A	/		/		/		/		
27	MH	Clear	7/1m	/		/		/		/		
28	MH	PCloudy	7/1m	/		/		/		/		
29	KM	Clear	N/A	/		/		/		/		
30	KM	Clear	7/11									
31												

MANAGER SIGNATURE: _____

DATE: _____

7/6/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF May 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	m H	Clear	N/A	/		/		/		/		
2	m H	Rain	N/A	/		/		/		/		
3	m H	Cloudy	N/A	/		/		/		/		
4	km	Cloudy	N/A	/		/		/		/		
5	km	Rain	N/A	/		/		/		/		
6	km	Rain	N/A	/		/		/		/		
7	km	Cloudy	N/A	/		/		/		/		
8	m H	Cloudy	N/A	/		/		/		/		
9	m H	Clear	N/A	/		/		/		/		
10	m H	Cloudy	N/A	/		/		/		/		
11	km	Cloudy	N/A	/		/		/		/		
12	km	Rain	N/A	/		/		/		/		
13	km	Cloudy	WESS	/		/		/		/		
14	km	Cloudy	WESS	/		/		/		/		
15	km	Clear	GLT	/		/		/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
<input type="checkbox"/> Original to File
<input type="checkbox"/> Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF May 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	MT	Clear	N/A	✓		✓		✓		✓		
17	MT	Clear	N/A	✓		✓		✓		✓		
18	KM	Clear	N/A	✓		✓		✓		✓		
19	KM	Cloudy	N/A	✓		✓		✓		✓		
20	KM	Cloudy	N/A	✓		✓		✓		✓		
21	KM	Clear	N/A	✓		✓		✓		✓		
22	MT	Clear	N/A	✓		✓		✓		✓		
23	MT	Clear	N/A	✓		✓		✓		✓		
24	MT	Clear	N/A	✓		✓		✓		✓		
25	KM	Clear	N/A	✓		✓		✓		✓		
26	KM	Clear	N/A	✓		✓		✓		✓		
27	KM	Cloudy	N/A	✓		✓		✓		✓		
28	KM	Clear	N/A	✓		✓		✓		✓		
29	MT	Clear	72IS	✓		✓		✓		✓		
30	MT	Clear	N/A	✓		✓		✓		✓		
31	MT	Clear	N/A	✓		✓		✓		✓		

MANAGER SIGNATURE:

John Welch DATE: 6/1/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF April 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	PW	Rain	N/A	/		/		/		/		
2	PW	Cloudy	N/A	/		/		/		/		
3	PW	Rain	N/A	/		/		/		/		
4	PW	Cloudy	N/A	/		/		/		/		
5	PW	Clear	N/A	/		/		/		/		
6	KM	Clear	N/A	/		/		/		/		
7	KM	Clear	N/A	/		/		/		/		
8	PW	Cloudy	RSTD	/		/		/		/		
9	PW	Rain	N/A	/		/		/		/		
10	PW	Rain	FI I1	/		/		/		/		
11	PW	Cloudy	N/A	/		/		/		/		
12	PW	Cloudy	N/A	/		/		/		/		
13	KM	Rain	N/A	/		/		/		/		
14	KM	Rain	N/A	/		/		/		/		
15	PW	Cloudy	GSIS	/		/		/		/		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
<input type="checkbox"/> Original to File
<input type="checkbox"/> Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF April 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	Km	Cloudy	Alton	/		/		/		/		
17	Km	Rain	N/A	/		/		/		/		
18	mt	Sog	N/A	/		/		/		/		
19	mt	Clear	N/A	/		/		/		/		
20	Km	Clear	N/A	/		/		/		/		
21	Km	Clear	N/A	/		/		/		/		
22	Km	Cloudy	N/A	/		/		/		/		
23	Km	Cloudy	N/A	/		/		/		/		
24	Km	Cloudy	N/A	/		/		/		/		
25	mt	Cloudy	N/A	/		/		/		/		
26	mt	Cloudy	N/A	/		/		/		/		
27	Km	Cloudy	N/A	/		/		/		/		
28	Km	Rain	N/A	/		/		/		/		
29	Km	Rain	N/A	/		/		/		/		
30	Km	Sog	N/A	/		/		/		/		
31												

MANAGER SIGNATURE:

[Signature]

DATE:

5/1/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF March 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	AM	Rain	4111	✓		✓		✓		✓		
17	AM	Rain	4111	✓		✓		✓		✓		
18	AM	Cloudy	7111	✓		✓		✓		✓		
19	PW	Rain	5111	✓		✓		✓		✓		
20	PW	Cloudy	N/A	✓		✓		✓		✓		
21	AM	Cloudy	N/A	✓		✓		✓		✓		
22	PW	Cloudy	N/A	✓		✓		✓		✓		
23	PW	Cloudy	N/A	✓		✓		✓		✓		
24	AM	Rain	N/A	✓		✓		✓		✓		
25	PW	Rain	N/A	✓		✓		✓		✓		
26	PW	Cloudy	N/A	✓		✓		✓		✓		
27	PW	Cloudy	N/A	✓		✓		✓		✓		
28	PW	Shower	N/A	✓		✓		✓		✓		
29	PW	Cloudy	N/A	✓		✓		✓		✓		
30	PW	Cloudy	N/A	✓		✓		✓		✓		
31	AM	Rain	N/A	✓		✓		✓		✓		

MANAGER SIGNATURE: _____

DATE: _____

[Signature] 3/31/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF March 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	HM	Cloudy	N/A	✓		✓		✓		✓		
2	PW	Cloudy	N/A	✓		✓		✓		✓		
3	HM	Cloudy	N/A	✓		✓		✓		✓		
4	PW	Cloudy	N/A	✓		✓		✓		✓		
5	PW	Cloudy	N/A	✓		✓		✓		✓		
6	PW	Cloudy	N/A	✓		✓		✓		✓		
7	HM	Cloudy	N/A	✓		✓		✓		✓		
8	PW	Cloudy	4 LIS	✓		✓		✓		✓		
9	PW	Cloudy	6 SIS	✓		✓		✓		✓		
10	HM	Cloudy	N/A	✓		✓		✓		✓		
11	PW	Clear	N/A	✓		✓		✓		✓		
12	PW	Clear	N/A	✓		✓		✓		✓		
13	PW	Clear	RSTD	✓		✓		✓		✓		
14	HM	Cloudy	N/A	✓		✓		✓		✓		
15	PW	Drum	42 IS	✓		✓		✓		✓		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

☐ Original to File

☐ Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF February 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	Km	dry	COIL	✓		✓		✓		✓		
17	Km	dry	N/A	✓		✓		✓		✓		
18	Km	dry	N/A	✓		✓		✓		✓		
19	Km	dry	N/A	✓		✓		✓		✓		
20	PW	clean	N/A	✓		✓		✓		✓		
21	MH	rain	N/A	✓		✓		✓		✓		
22	MH	cloudy	N/A	✓		✓		✓		✓		
23	KM	cloudy	N/A	✓		✓		✓		✓		
24	Km	cloudy	N/A	✓		✓		✓		✓		
25	Km	cloudy	N/A	✓		✓		✓		✓		
26	Km	cloudy	N/A	✓		✓		✓		✓		
27	im	cloudy	N/A	✓		✓		✓		✓		
28	Km	cloudy	N/A	✓		✓		✓		✓		
29												
30												
31												

MANAGER SIGNATURE: _____

DATE: _____

3/4/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF February 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	mH	Log	N/A	✓		✓		✓		✓		
2	km	Log	LOSTD	✓		✓		✓		✓		
3	km	Debris	2 IS	✓		✓		✓		✓		
4	km	Clear	N/A	✓		✓		✓		✓		
5	km	Clear	G1IA	✓		✓		✓		✓		
6	mH	Clear	G1IA	✓		✓		✓		✓		
7	mH	Clear	N/A	✓		✓		✓		✓		
8	mH	Clear	N/A	✓		✓		✓		✓		
9	km	Clear	LOSTD	✓		✓		✓		✓		
10	km	Snow	N/A	✓		✓		✓		✓		
11	km	Clear	N/A	✓		✓		✓		✓		
12	km	Clear	N/A	✓		✓		✓		✓		
13	mH	Clear	N/A	✓		✓		✓		✓		
14	mH	Clear	N/A	✓		✓		✓		✓		
15	mH	Clear	G1IA	✓		✓		✓		✓		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
<input type="checkbox"/> Original to File
<input type="checkbox"/> Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF January 2009

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	mH	Clear	PSTD	✓		✓		✓		✓		
17	mH	Fog	72IS	✓		✓		✓		✓		
18	mH	Clear	RFSS	✓		✓		✓		✓		
19	km	Clear	WSTD	✓		✓		✓		✓		
20	km	Clear	PSTD	✓		✓		✓		✓		
21	km	Clear	N/A	✓		✓		✓		✓		
22	km	Clear	N/A	✓		✓		✓		✓		
23	mH	Fog	B5IS	✓		✓		✓		✓		
24	mH	Cloudy	WSTD	✓		✓		✓		✓		
25	mH	Snow	WSTD	✓		✓		✓		✓		
26	km	Cloudy	PSTD	✓		✓		✓		✓		
27	km	Rain	N/A	✓		✓		✓		✓		
28	mH	Cloudy	N/A	✓		✓		✓		✓		
29	km	Fog	N/A	✓		✓		✓		✓		
30	mH	Fog	N/A	✓		✓		✓		✓		
31	mH	Fog	N/A	✓		✓		✓		✓		

MANAGER SIGNATURE:

[Signature]

DATE:

2/2/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF January 2009

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Rain	N/A	✓		✓		✓		✓		
2	MH	Rain	WESS	✓		✓		✓		✓		
3	MH	Cloudy	GSIS	✓		✓		✓		✓		
4	MH	Fog	GSIS	✓		✓		✓		✓		
5	KM	Rain	WESS	✓		✓		✓		✓		
6	KM	Rain	WESS	✓		✓		✓		✓		
7	KM	Rain	GLI1	✓		✓		✓		✓		
8	KM	Rain	GLI1	✓		✓		✓		✓		
9	MH	Cloudy	WESS	✓		✓		✓		✓		
10	MH	Fog	PSTD	✓		✓		✓		✓		
11	MH	Cloudy	PSTD	✓		✓		✓		✓		
12	KM	Rain	N/A	✓		✓		✓		✓		
13	KM	Fog	PSTD	✓		✓		✓		✓		
14	KM	Cloudy	PSTD	✓		✓		✓		✓		
15	KM	Fog	PSTD	✓		✓		✓		✓		

Routing: Please check box when reviewed
☐ 1. Initial Review
☐ 2. Terminal Manager
☐ 3. Assistant

Distribution:
☐ Original to File
☐ Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF December 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	km	Cloudy	GLI1	✓		✓		✓		✓		
2	km	Cloudy	WOSTO	✓		✓		✓		✓		
3	km	Cloudy	WOFSS	✓		✓		✓		✓		
4	km	Clear	N/A	✓		✓		✓		✓		
5	DW	Clear	N/A	✓		✓		✓		✓		
6	km	Fog	WOSTO	✓		✓		✓		✓		
7	DW	Cloudy	WOFSS	✓		✓		✓		✓		
8	km	Cloudy	WOFSS	✓		✓		✓		✓		
9	km	Fog	WOFSS	✓		✓		✓		✓		
10	km	Cloudy	N/A	✓		✓		✓		✓		
11	km	Cloudy	GLI1	✓		✓		✓		✓		
12	MH	Cloudy	WOFSS	✓		✓		✓		✓		
13	MH	Rain	N/A	✓		✓		✓		✓		
14	MH	Snow	N/A	✓		✓		✓		✓		
15	km	Cloudy	N/A	✓		✓		✓		✓		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

☐ Original to File

☐ Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF December 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	PW	Clear	GSIS	✓		✓		✓		✓		
17	KM	Cloudy	GSIS	✓		✓		✓		✓		
18	KM	Rain	RSTD	✓		✓		✓		✓		
19	MH	Snow	72IS	✓		✓		✓		✓		
20	MH	Snow	72IS	✓		✓		✓		✓		
21	PW	Snow	N/A	✓		✓		✓		✓		
22	KM	Snow	N/A	✓		✓		✓		✓		
23	KM	Snow	N/A	✓		✓		✓		✓		
24	KM	Snow	RSTD	✓		✓		✓		✓		
25	KM	Snow	N/A	✓		✓		✓		✓		
26	MH	Fog	N/A	✓		✓		✓		✓		
27	MH	Rain	72IS	✓		✓		✓		✓		
28	MH	Cloudy	72IS	✓		✓		✓		✓		
29	KM	Rain	72IS	✓		✓		✓		✓		
30	KM	Cloudy	72IS	✓		✓		✓		✓		
31	KM	Rain	72IS	✓		✓		✓		✓		

MANAGER SIGNATURE:

A. Miller DATE: 1/5/09

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF November 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	mH	Fog	N/A	✓		✓		✓		✓		
17	km	Fog	N/A	✓		✓		✓		✓		
18	km	Fog	BSIF	✓		✓		✓		✓		
19	km	Cloudy	WSTO	✓		✓		✓		✓		
20	km	Cloudy	N/A	✓		✓		✓		✓		
21	km	Cloudy	N/A	✓		✓		✓		✓		
22	mH	Fog	N/A	✓		✓		✓		✓		
23	mH	Fog	N/A	✓		✓		✓		✓		
24	km	Cloudy	7:30pm	✓		✓		✓		✓		
25	km	Cloudy	7:30pm	✓		✓		✓		✓		
26	km	Cloudy	BSIF	✓		✓		✓		✓		
27	km	Cloudy	N/A	✓		✓		✓		✓		
28	mH	Fog	7:30pm	✓		✓		✓		✓		
29	mH	Fog	N/A	✓		✓		✓		✓		
30	mH	Fog	6:11:1	✓		✓		✓		✓		
31	✓	✓	✓	✓		✓		✓		✓		

MANAGER SIGNATURE:

[Signature]

DATE:

12/1/08

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF November 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Cloudy	WFSS	✓		✓		✓		✓		
2	MH	Rain	N/A	✓		✓		✓		✓		
3	HM	Showers	N/A	✓		✓		✓		✓		
4	HM	Cloudy	75hm	✓		✓		✓		✓		
5	HM	Rain	N/A	✓		✓		✓		✓		
6	HM	Rain	RSTD	✓		✓		✓		✓		
7	MH	Showers	RSTD	✓		✓		✓		✓		
8	MH	Cloudy	RSTD	✓		✓		✓		✓		
9	MH	Cloudy	N/A	✓		✓		✓		✓		
10	HM	Rain	N/A	✓		✓		✓		✓		
11	HM	Rain	N/A	✓		✓		✓		✓		
12	HM	Rain	N/A	✓		✓		✓		✓		
13	HM	Cloudy	N/A	✓		✓		✓		✓		
14	MH	Clear	N/A	✓		✓		✓		✓		
15	MH	Clear	N/A	✓		✓		✓		✓		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
<input type="checkbox"/> Original to File
<input type="checkbox"/> Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF October 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	Km	cloudy	N/A	✓		✓		✓		✓		
17	mH	Fog	N/A	✓		✓		✓		✓		
18	mH	Cloudy	N/A	✓		✓		✓		✓		
19	mH	Fog	WESS	✓		✓		✓		✓		
20	Km	Cloudy	N/A	✓		✓		✓		✓		
21	Km	Fog	7:30am	✓		✓		✓		✓		
22	Km	Cloudy	7:30am	✓		✓		✓		✓		
23	Km	Cloudy	N/A	✓		✓		✓		✓		
24	mH	Clear	WOSTO	✓		✓		✓		✓		
25	mH	Clear	N/A	✓		✓		✓		✓		
26	mH	Clear	7:30am	✓		✓		✓		✓		
27	Km	Cloudy	7:30am	✓		✓		✓		✓		
28	Km	Fog	WOSTO	✓		✓		✓		✓		
29	Km	Cloudy	N/A	✓		✓		✓		✓		
30	Km	Cloudy	N/A	✓		✓		✓		✓		
31	mH	Rain	N/A	✓		✓		✓		✓		

MANAGER SIGNATURE:

Michael

DATE:

10/31/08

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF October 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	KM	Fog	no	✓		✓		✓		✓		
2	KM	Rain	no	✓		✓		✓		✓		
3	MH	Rain	no	✓		✓		✓		✓		
4	MH	Shower	72hr	✓		✓		✓		✓		
5	MH	Rain	72hr	✓		✓		✓		✓		
6	KM	Rain	LOSTO	✓		✓		✓		✓		
7	KM	Rain	72hr	✓		✓		✓		✓		
8	KM	Fog	72hr	✓		✓		✓		✓		
9	KM	Partly Cloudy	OSTO	✓		✓		✓		✓		
10	MH	Cloudy	LOSTO	✓		✓		✓		✓		
11	MH	Cloudy	LOESS	✓		✓		✓		✓		
12	MH	Cloudy	GSTIS	✓		✓		✓		✓		
13	PW	Partly Cloudy	72hr	✓		✓		✓		✓		
14	MH	Cloudy	N/A	✓		✓		✓		✓		
15	KM	Partly Cloudy	72hr	✓		✓		✓		✓		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

☐ Original to File

☐ Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

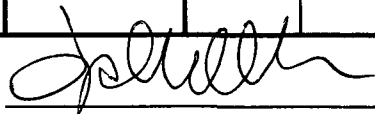
MONTH OF September 2008

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	Clear	76RN	✓		✓		✓		✓		
17	KM	Clear	76RN	✓		✓		✓		✓		
18	KM	Partly cloudy	76RN	✓		✓		✓		✓		
19	KM	Partly cloudy	76RN	✓		✓		✓		✓		
20	MH	Cloudy	76RN	✓		✓		✓		✓		
21	MH	Rain	no	✓		✓		✓		✓		
22	KM	Cloudy	no	✓		✓		✓		✓		
23	KM	Fog	76RN	✓		✓		✓		✓		
24	KM	Cloudy	76RN	✓		✓		✓		✓		
25	KM	Partly cloudy	65IS	✓		✓		✓		✓		
26	MH	Clear	RSTD RFSS	✓		✓		✓		✓		
27	MH	Clear	RFSS	✓		✓		✓		✓		
28	MH	Clear	WFSS	✓		✓		✓		✓		
29	KM	Clear	76RN	✓		✓		✓		✓		
30	KM	Clear			✓	✓		✓		✓		
31												

MANAGER SIGNATURE:



DATE:

10/3/08

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF September 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	clearly	N/A	✓		✓		✓		✓		
2	MH	clearly	N/A	✓		✓		✓		✓		
3	km	clearly	2LHm	✓		✓		✓		✓		
4	km	clear	WSTD	✓		✓		✓		✓		
5	MH	clear	G1I1	✓		✓		✓		✓		
6	MH	clearly	2LHm	✓		✓		✓		✓		
7	MH	clear	WFSS	✓		✓		✓		✓		
8	MH	clear	G1I1	✓		✓		✓		✓		
9	km	clear	WSTD	✓		✓		✓		✓		
10	km	clear	2LHm	✓		✓		✓		✓		
11	km	clear	WSTD	✓		✓		✓		✓		
12	MH	clear	WFSS	✓		✓		✓		✓		
13	MH	clear	WFSS	✓		✓		✓		✓		
14	MH	clear	G1I1	✓		✓		✓		✓		
15	km	clear	2LHm	✓		✓		✓		✓		

Routing: Please check box when reviewed

☐ 2. Terminal Manager

☐ 3. Assistant

Distribution:

☐ Original to File

☐ Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF August 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	mH	Clear	42IS	✓		✓		✓		✓		
17	mH	partly	WESS	✓		✓		✓		✓		
18	Km	cloudy	7Hm	✓		✓		✓		✓		
19	Km	cloudy	7Hm	✓		✓		✓		✓		
20	Km	rain	7Hm	✓		✓		✓		✓		
21	Km	cloudy	WSTD	✓		✓		✓		✓		
22	mH	partly	WESS	✓		✓		✓		✓		
23	mH	Clear	R ESS	✓		✓		✓		✓		
24	mH	Clear	28TD	✓		✓		✓		✓		
25	Km	cloudy	7Hm	✓		✓		✓		✓		
26	Km	partly	7Hm	✓		✓		✓		✓		
27	Km	cloudy	7Hm	✓		✓		✓		✓		
28	Km	partly	N/A	✓		✓		✓		✓		
29	mH	fog	25TD	✓		✓		✓		✓		
30	mH	partly	7Hm	✓		✓		✓		✓		
31	mH	partly	7Hm	✓		✓		✓		✓		

MANAGER SIGNATURE:

DATE:

9/2/08

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF August 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	mH	Cloudy	72IS	✓		✓		✓		✓		
2	mH	Cloudy	N/A	✓		✓		✓		✓		
3	mH	Cloudy	N/A	✓		✓		✓		✓		
4	Km	Clean	N/A	✓		✓		✓		✓		
5	Km	Clean	N/A	✓		✓		✓		✓		
6	Km	Clean	29hm	✓		✓		✓		✓		
7	Km	Cloudy	29hm	✓		✓		✓		✓		
8	mH	Cloudy	65IS	✓		✓		✓		✓		
9	mH	Rain	N/A	✓		✓		✓		✓		
10	mH	Cloudy	N/A	✓		✓		✓		✓		
11	Km	Cloudy	N/A	✓		✓		✓		✓		
12	Km	Cloudy	N/A	✓		✓		✓		✓		
13	Km	Clean	72IS	✓		✓		✓		✓		
14	Km	Clean	61IS	✓		✓		✓		✓		
15	mH	Clean	61IS	✓		✓		✓		✓		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
<input type="checkbox"/> Original to File
<input type="checkbox"/> Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF July 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
1	MH	Clear	RSTD	✓		✓		✓		✓		
2	MB	Cloudy	4111	✓		✓		✓		✓		
3	MH	Cloudy	G114	✓		✓		✓		✓		
4	MH	Cloudy	7/20m	✓		✓		✓		✓		
5	MH	Cloudy	N/A	✓		✓		✓		✓		
6	MH	Cloudy	PFSS	✓		✓		✓		✓		
7	BM	Cloudy	N/A	✓		✓		✓		✓		
8	BM	Clear	N/A	✓		✓		✓		✓		
9	BM	Clear	N/A	✓		✓		✓		✓		
10	BM	Clear	N/A	✓		✓		✓		✓		
11	MH	Clear	N/A	✓		✓		✓		✓		
12	MH	Clear	N/A	✓		✓		✓		✓		
13	MH	Clear	N/A	✓		✓		✓		✓		
14	BM	Clear	N/A	✓		✓		✓		✓		
15	BM	Cloudy	N/A	✓		✓		✓		✓		

Routing:	Please check box when reviewed
<input type="checkbox"/>	2. Terminal Manager
<input type="checkbox"/>	3. Assistant

Distribution:
<input type="checkbox"/> Original to File
<input type="checkbox"/> Copy to Stormwater Report File

PORTLAND BULK TERMINAL 5
DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

MONTH OF July 2008

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Date	Initials	Weather	Product Handled	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen?		Dock Surface Free of Excessive Product Spillage ?		Comments Describe any corrections taken and the date of completion (Attach separate sheet if required)
				YES	NO	YES	NO	YES	NO	YES	NO	
16	KM	Partly	N/A	✓		✓		✓		✓		
17	KM	Partly	N/A	✓		✓		✓		✓		
18	MH	Cloudy	Q/A	✓		✓		✓		✓		
19	MH	Cloudy	N/A	✓		✓		✓		✓		
20	MH	Clear	N/A	✓		✓		✓		✓		
21	KM	Cloudy	N/A	✓		✓		✓		✓		
22	KM	Partly	7:30m	✓		✓		✓		✓		
23	KM	Cloudy	7:45m	✓		✓		✓		✓		
24	KM	Partly	7:50m	✓		✓		✓		✓		
25	MH	Clear	7:25	✓		✓		✓		✓		
26	MH	Clear	7:25	✓		✓		✓		✓		
27	MH	Cloudy	N/A	✓		✓		✓		✓		
28	KM	Clear	N/A	✓		✓		✓		✓		
29	KM	Cloudy	N/A	✓		✓		✓		✓		
30	KM	Cloudy	N/A	✓		✓		✓		✓		
31	KM	Partly	LOESS	✓		✓		✓		✓		

MANAGER SIGNATURE: _____

DATE: _____

7/31/08

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Climatological Report (Monthly)

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CXUS56 KPQR 011523
CLMPDX

JULY CLIMATOLOGICAL REPORT FOR PORTLAND OREGON
NATIONAL WEATHER SERVICE PORTLAND OREGON
811 AM PDT FRI AUG 1 2008

TEMPERATURE DATA..... (DEGREES F)

AVERAGE MONTHLY TEMPERATURE....	68.8	OR	0.7 DEGREES ABOVE NORMAL
AVERAGE MAXIMUM TEMPERATURE....	80.8		
AVERAGE MINIMUM TEMPERATURE....	56.8		
HIGHEST TEMPERATURE WAS.....	93	ON DAY	13
LOWEST TEMPERATURE WAS.....	51	ON DAY	11

HEATING DEGREES DAYS..	(BASE 65)	COOLING DEGREES DAYS
MONTHLY TOTAL.....	6	MONTHLY TOTAL..... 134
DEPARTURE FROM NORMAL....	-15	DEPARTURE FROM NORMAL..... 1
SEASONAL TOTAL (JUL-JUN)..	6	SEASONAL TOTAL (JAN-DEC)... 232
DEPARTURE FROM NORMAL....	-15	DEPARTURE FROM NORMAL..... 41

PRECIPITATION DATA.... ..RAIN..
TOTAL FOR THE MONTH..... 0.29 OR -0.43 INCHES BELOW NORMAL
TOTAL SINCE JANUARY 1ST..... 16.03 OR -4.26 INCHES BELOW NORMAL
GREATEST 24 HOUR RAINFALL.... 0.26 ON 3- 3

..SNOW..
TOTAL FOR THE MONTH..... 0.0
TOTAL FOR THE SEASON..... 0.0
GREATEST 24 HOUR SNOWFALL... 0

..NUMBER OF DAYS..
WITH .01 INCHES OR MORE... 4 HIGHS 32 DEGREES OR COLDER... 0
WITH .10 INCHES OR MORE... 1 HIGHS 90 DEGREES OR WARMER... 5
WITH .50 INCHES OR MORE... 0 LOWS 32 DEGREES OR COLDER... 0
WITH 1.00 INCHES OR MORE... 0 LOWS 0 DEGREES OR COLDER... 0

SKY CONDITION.....	SEA LEVEL PRESSURE (INCHES).....
NUMBER OF DAYS CLEAR..... 10	HIGHEST 30.23 ON 23

NUMBER OF DAYS PTCLDY..... 19 LOWEST 29.80 ON 31
NUMBER OF DAYS CLOUDY..... 2

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 6.5 MPH
THE FASTEST TWO-MINUTE WIND WAS..... 23 MPH FROM 320 DEGREES
THE HIGHEST PEAK WIND GUST WAS..... 33 MPH FROM 20 DEGREES

REMARKS.....

3RD...RECORD RAINFALL OF 0.26 INCHES. OLD RECORD 0.25 IN 1986.

VISIT [HTTP://WEATHER.GOV/PORTLAND](http://weather.gov/portland)

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Climatological Report (Monthly)

000
CXUS56 KPQR 011506
CLMPDX

AUGUST CLIMATOLOGICAL REPORT FOR PORTLAND OREGON
NATIONAL WEATHER SERVICE PORTLAND OREGON
810 AM PDT MON SEP 1 2008

TEMPERATURE DATA..... (DEGREES F)

AVERAGE MONTHLY TEMPERATURE.... 69.6 OR 1.1 DEGREES ABOVE NORMAL
AVERAGE MAXIMUM TEMPERATURE.... 80.0
AVERAGE MINIMUM TEMPERATURE.... 59.2
HIGHEST TEMPERATURE WAS..... 102 ON DAY 14
LOWEST TEMPERATURE WAS..... 48 ON DAY 31

HEATING DEGREES DAYS..	(BASE 65)	COOLING DEGREES DAYS
MONTHLY TOTAL.....	17	MONTHLY TOTAL..... 169
DEPARTURE FROM NORMAL....	-4	DEPARTURE FROM NORMAL..... 24
SEASONAL TOTAL (JUL-JUN)..	23	SEASONAL TOTAL (JAN-DEC)... 401
DEPARTURE FROM NORMAL....	-19	DEPARTURE FROM NORMAL..... 65

PRECIPITATION DATA.... ..RAIN..
TOTAL FOR THE MONTH..... 1.23 OR 0.3 INCHES ABOVE NORMAL
TOTAL SINCE JANUARY 1ST..... 17.26 OR 3.96 INCHES BELOW NORMAL
GREATEST 24 HOUR RAINFALL.... 0.44 ON 19-20

..SNOW..
TOTAL FOR THE MONTH..... 0.0
TOTAL FOR THE SEASON..... 0.0
GREATEST 24 HOUR SNOWFALL... 0

..NUMBER OF DAYS..
WITH .01 INCHES OR MORE... 9 HIGHS 32 DEGREES OR COLDER... 0
WITH .10 INCHES OR MORE... 5 HIGHS 90 DEGREES OR WARMER... 5
WITH .50 INCHES OR MORE... 0 LOWS 32 DEGREES OR COLDER... 0
WITH 1.00 INCHES OR MORE... 0 LOWS 0 DEGREES OR COLDER... 0

SKY CONDITION.....	SEA LEVEL PRESSURE (INCHES).....
NUMBER OF DAYS CLEAR..... 3	HIGHEST 30.21 ON 28
NUMBER OF DAYS PTCLDY..... 22	LOWEST 29.65 ON 17

NUMBER OF DAYS CLOUDY..... 6

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 6.0 MPH

THE FASTEST TWO-MINUTE WIND WAS..... 21 MPH FROM 310 DEGREES

THE HIGHEST PEAK WIND GUST WAS..... 26 MPH FROM 320 DEGREES

REMARKS.....

ALL RECORDS ARE FOR THE PORTLAND INTL AIRPORT SITE. RECORDS AT THIS SITE BEGAN IN OCTOBER 1940.

14TH...RECORD MAXIMUM TEMPERATURE OF 102 DEGREES. OLD RECORD 97 SET IN 1967.

15TH...RECORD HIGH MINIMUM TEMPERATURE OF 67 DEGREES. OLD RECORD 65 SET IN 1950.

...RECORD MAXIMUM TEMPERATURE OF 100 DEGREES. OLD RECORD 98 SET IN 1967.

16TH...RECORD HIGH MINIMUM TEMPERATURE OF 68 DEGREES. OLD RECORD 63 SET IN 1979.

17TH...RECORD HIGH MINIMUM TEMPERATURE OF 67 DEGREES. OLD RECORD 66 SET IN 1977.

VISIT [HTTP://WEATHER.GOV/PORTLAND](http://weather.gov/portland)

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Climatological Report (Monthly)

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CXUS56 KPQR 031912 CCA
CLMPDX

SEPTEMBER CLIMATOLOGICAL REPORT FOR PORTLAND OREGON...CORRECTED
NATIONAL WEATHER SERVICE PORTLAND OREGON
1201 PM PDT FRI OCT 3 2008

TEMPERATURE DATA..... (DEGREES F)

AVERAGE MONTHLY TEMPERATURE.... 65.2 OR 1.6 DEGREES ABOVE NORMAL
AVERAGE MAXIMUM TEMPERATURE.... 77.3
AVERAGE MINIMUM TEMPERATURE.... 53.1
HIGHEST TEMPERATURE WAS..... 91 ON DAY 11
LOWEST TEMPERATURE WAS..... 44 ON DAY 23

HEATING DEGREES DAYS..	(BASE 65)	COOLING DEGREES DAYS
MONTHLY TOTAL.....	57	MONTHLY TOTAL..... 73
DEPARTURE FROM NORMAL....	-21	DEPARTURE FROM NORMAL..... 21
SEASONAL TOTAL (JUL-JUN)..	80	SEASONAL TOTAL (JAN-DEC)... 474
DEPARTURE FROM NORMAL....	-40	DEPARTURE FROM NORMAL..... 86

PRECIPITATION DATA.... ..RAIN..
TOTAL FOR THE MONTH..... 0.48 OR 1.17 INCHES BELOW NORMAL
TOTAL SINCE JANUARY 1ST..... 17.85 OR 5.14 INCHES BELOW NORMAL
GREATEST 24 HOUR RAINFALL.... 0.42 ON 21-22

..SNOW..
TOTAL FOR THE MONTH..... 0.0
TOTAL FOR THE SEASON..... 0.0
GREATEST 24 HOUR SNOWFALL... 0

..NUMBER OF DAYS..
WITH .01 INCHES OR MORE... 3 HIGHS 32 DEGREES OR COLDER... 0
WITH .10 INCHES OR MORE... 1 HIGHS 90 DEGREES OR WARMER... 2
WITH .50 INCHES OR MORE... 0 LOWS 32 DEGREES OR COLDER... 0
WITH 1.00 INCHES OR MORE... 0 LOWS 0 DEGREES OR COLDER... 0

SKY CONDITION..... SEA LEVEL PRESSURE (INCHES).....
NUMBER OF DAYS CLEAR..... 11 HIGHEST 30.28 ON 22

NUMBER OF DAYS PTCLDY..... 13 LOWEST 29.74 ON 8
NUMBER OF DAYS CLOUDY..... 6

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 5.1 MPH
THE FASTEST TWO-MINUTE WIND WAS..... 23 MPH FROM 70 DEGREES
THE HIGHEST PEAK WIND GUST WAS..... 30 MPH FROM 110 DEGREES

REMARKS.....

ALL RECORDS ARE FOR THE PORTLAND INTL AIRPORT SITE. RECORDS AT THIS
SITE BEGAN IN OCTOBER 1940.

11TH...A RECORD HIGH TEMPERATURE OF 91 DEGREES WAS SET.
THIS BREAKS THE OLD RECORD OF 90 SET IN 1975.
29TH...A RECORD HIGH TEMPERATURE OF 89 DEGREES WAS TIED.
THIS TIES THE OLD RECORD OF 89 SET IN 1993.

VISIT [HTTP://WEATHER.GOV/PORTLAND](http://weather.gov/portland)

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Climatological Report (Monthly)

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CXUS56 KPQR 011515
CLMPDX

OCTOBER CLIMATOLOGICAL REPORT FOR PORTLAND OREGON
NATIONAL WEATHER SERVICE PORTLAND OREGON
814 AM PDT SAT NOV 1 2008

TEMPERATURE DATA..... (DEGREES F)

AVERAGE MONTHLY TEMPERATURE.... 53.5 OR 0.8 DEGREES BELOW NORMAL
AVERAGE MAXIMUM TEMPERATURE.... 62.2
AVERAGE MINIMUM TEMPERATURE.... 44.9
HIGHEST TEMPERATURE WAS..... 73 ON DAY 1
LOWEST TEMPERATURE WAS..... 37 ON DAY 24

HEATING DEGREES DAYS..	(BASE 65)	COOLING DEGREES DAYS
MONTHLY TOTAL.....	349	MONTHLY TOTAL..... 0
DEPARTURE FROM NORMAL....	30	DEPARTURE FROM NORMAL..... -2
SEASONAL TOTAL (JUL-JUN) .	429	SEASONAL TOTAL (JAN-DEC)... 474
DEPARTURE FROM NORMAL....	-10	DEPARTURE FROM NORMAL..... 84

PRECIPITATION DATA.... ..RAIN..
TOTAL FOR THE MONTH..... 1.77 OR 1.11 INCHES BELOW NORMAL
TOTAL SINCE JANUARY 1ST..... 19.51 OR 6.24 INCHES BELOW NORMAL
GREATEST 24 HOUR RAINFALL.... 0.73 ON 3- 4

..SNOW..
TOTAL FOR THE MONTH..... 0.0
TOTAL FOR THE SEASON..... 0.0
GREATEST 24 HOUR SNOWFALL... 0

..NUMBER OF DAYS..
WITH .01 INCHES OR MORE... 12 HIGHS 32 DEGREES OR COLDER... 0
WITH .10 INCHES OR MORE... 8 HIGHS 90 DEGREES OR WARMER... 0
WITH .50 INCHES OR MORE... 1 LOWS 32 DEGREES OR COLDER... 0
WITH 1.00 INCHES OR MORE... 0 LOWS 0 DEGREES OR COLDER... 0

SKY CONDITION..... SEA LEVEL PRESSURE (INCHES).....
NUMBER OF DAYS CLEAR..... 3 HIGHEST 30.59 ON 21

NUMBER OF DAYS PTCLDY..... 19 LOWEST 29.29 ON 4
NUMBER OF DAYS CLOUDY..... 9

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 5.1 MPH
THE FASTEST TWO-MINUTE WIND WAS..... 31 MPH FROM 90 DEGREES
THE HIGHEST PEAK WIND GUST WAS..... 38 MPH FROM 100 DEGREES

REMARKS.....
NO RECORDS TIED OR BROKEN

VISIT [HTTP://WEATHER.GOV/PORTLAND](http://weather.gov/portland)

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Climatological Report (Monthly)

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CXUS56 KPQR 011444
CLMPDX

NOVEMBER CLIMATOLOGICAL REPORT FOR PORTLAND OREGON
NATIONAL WEATHER SERVICE PORTLAND OREGON
644 AM PST MON DEC 1 2008

TEMPERATURE DATA..... (DEGREES F)

AVERAGE MONTHLY TEMPERATURE.... 49.2 OR 3.4 DEGREES ABOVE NORMAL
AVERAGE MAXIMUM TEMPERATURE.... 55.1
AVERAGE MINIMUM TEMPERATURE.... 43.3
HIGHEST TEMPERATURE WAS..... 64 ON DAY 7
LOWEST TEMPERATURE WAS..... 33 ON DAY 24

HEATING DEGREES DAYS..	(BASE 65)	COOLING DEGREES DAYS
MONTHLY TOTAL.....	465	MONTHLY TOTAL..... 0
DEPARTURE FROM NORMAL....	-95	DEPARTURE FROM NORMAL..... 0
SEASONAL TOTAL (JUL-JUN)..	894	SEASONAL TOTAL (JAN-DEC)... 474
DEPARTURE FROM NORMAL....	105	DEPARTURE FROM NORMAL..... 84

PRECIPITATION DATA.... ..RAIN..
TOTAL FOR THE MONTH..... 4.15 OR 1.46 INCHES BELOW NORMAL
TOTAL SINCE JANUARY 1ST..... 23.66 OR 7.7 INCHES BELOW NORMAL
GREATEST 24 HOUR RAINFALL.... 0.94 ON 12-12

..SNOW..
TOTAL FOR THE MONTH..... 0.0
TOTAL FOR THE SEASON..... 0.0
GREATEST 24 HOUR SNOWFALL... 0

..NUMBER OF DAYS..
WITH .01 INCHES OR MORE... 17 HIGHS 32 DEGREES OR COLDER... 0
WITH .10 INCHES OR MORE... 9 HIGHS 90 DEGREES OR WARMER... 0
WITH .50 INCHES OR MORE... 3 LOWS 32 DEGREES OR COLDER... 0
WITH 1.00 INCHES OR MORE... 0 LOWS 0 DEGREES OR COLDER... 0

SKY CONDITION..... SEA LEVEL PRESSURE (INCHES).....
NUMBER OF DAYS CLEAR..... 0 HIGHEST 30.56 ON 14

NUMBER OF DAYS PTCLDY..... 14 LOWEST 29.42 ON 3
NUMBER OF DAYS CLOUDY..... 16

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 7.0 MPH
THE FASTEST TWO-MINUTE WIND WAS..... 25 MPH FROM 200 DEGREES
THE HIGHEST PEAK WIND GUST WAS..... 35 MPH FROM 200 DEGREES

REMARKS.....

ALL RECORDS ARE FOR THE PORTLAND INTL AIRPORT SITE. RECORDS AT THIS
SITE BEGAN IN OCTOBER 1940.

...NOVEMBER 29 -- A RECORD HIGH TEMPERATURE OF 58 DEGREES TIED THE
OLD RECORD OF 58 SET IN 1995.
...NOVEMBER 12 -- A RECORD RAINFALL OF 0.94 INCHES BROKE THE OLD
RECORD OF 0.93 SET IN 1989.

VISIT [HTTP://WEATHER.GOV/PORTLAND](http://weather.gov/portland)

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Climatological Report (Monthly)

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CXUS56 KPQR 211908
CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
1108 AM PST WED JAN 21 2009

.....

...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF DECEMBER 2008...

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE	DATE(S)
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TEMPERATURE (F)

RECORD

HIGH	65	12/10/1993				
LOW	6	12/16/1964				
HIGHEST	57	12/01			62	12/04
LOWEST	20	12/21			27	12/09
		12/20				
		12/16				

AVG. MAXIMUM	42.8		45.4	-2.6	45.5	
AVG. MINIMUM	32.1		35.0	-2.9	36.4	
MEAN	37.5		40.2	-2.7	40.9	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	6		1.2	4.8	0	
DAYS MIN <= 32	14		9.8	4.2	6	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES)

RECORD

MAXIMUM	13.35	1996				
MINIMUM	1.38	1976				
TOTALS	2.70		5.71	-3.01	7.57	

DAYS >= .01	21	18.3	2.7	23
DAYS >= .10	10	11.9	-1.9	17
DAYS >= .50	1	3.9	-2.9	3
DAYS >= 1.00	0	1.1	-1.1	2

GREATEST

24 HR. TOTAL 0.68 12/29 TO 12/29

SNOWFALL (INCHES)

TOTALS MM

DEGREE_DAYS

HEATING TOTAL	847	756	91	740
SINCE 7/1	1741	1755	-14	1824
COOLING TOTAL	0	0	0	0
SINCE 1/1	474	390	84	400

WIND (MPH)

AVERAGE WIND SPEED	8.9		
RESULTANT WIND SPEED/DIRECTION	5/131		
HIGHEST WIND SPEED/DIRECTION	36/090	DATE	12/14
HIGHEST GUST SPEED/DIRECTION	46/080	DATE	12/15

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR	2
NUMBER OF DAYS PC	4
NUMBER OF DAYS CLOUDY	25

AVERAGE RH (PERCENT) 83

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	0	MIXED PRECIP	0
HEAVY RAIN	2	RAIN	7
LIGHT RAIN	16	FREEZING RAIN	0
LT FREEZING RAIN	3	HAIL	0
HEAVY SNOW	1	SNOW	8
LIGHT SNOW	12	SLEET	0
FOG	25	FOG W/VIS <= 1/4 MILE	4
HAZE	2		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

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Climatological Report (Monthly)

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CXUS56 KPQR 020033 CCA
CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
752 AM PST SUN FEB 1 2009

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...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF JANUARY 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR'S VALUE	DATE(S)
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TEMPERATURE (F)

RECORD

HIGH	66	01/18/2005				
LOW	-2	01/31/1950				
HIGHEST	56	01/07			55	01/04
LOWEST	25	01/04			23	01/22
AVG. MAXIMUM	46.2		45.6	0.6	43.9	
AVG. MINIMUM	33.9		34.2	-0.3	33.6	
MEAN	40.0		39.9	0.1	38.8	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		1.3	-1.3	0	
DAYS MIN <= 32	16		11.6	4.4	9	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES)

RECORD

MAXIMUM	8.51	1980				
MINIMUM	0.06	1985				
TOTALS	4.50		5.07	-0.57	4.71	
DAYS >= .01	14		17.2	-3.2	19	
DAYS >= .10	9		11.5	-2.5	13	
DAYS >= .50	2		3.2	-1.2	4	

DAYS >= 1.00 1 0.8 0.2 0
GREATEST
24 HR. TOTAL 3.13 01/01 TO 01/02

SNOWFALL (INCHES)
TOTALS MM

DEGREE_DAYS
HEATING TOTAL 767 765 2 805
SINCE 7/1 2508 2520 -12 2629
COOLING TOTAL 0 0 0 0
SINCE 1/1 0 0 0 0

.....
WIND (MPH)
AVERAGE WIND SPEED 7.2
RESULTANT WIND SPEED/DIRECTION 4/130
HIGHEST WIND SPEED/DIRECTION 35/090 DATE 01/18
HIGHEST GUST SPEED/DIRECTION 44/100 DATE 01/18

SKY COVER
POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR 6
NUMBER OF DAYS PC 10
NUMBER OF DAYS CLOUDY 15

AVERAGE RH (PERCENT) 79

WEATHER CONDITIONS. NUMBER OF DAYS WITH
THUNDERSTORM 0 MIXED PRECIP 0
HEAVY RAIN 2 RAIN 4
LIGHT RAIN 15 FREEZING RAIN 0
LT FREEZING RAIN 0 HAIL 1
HEAVY SNOW 0 SNOW 3
LIGHT SNOW 6 SLEET 0
FOG 24 FOG W/VIS <= 1/4 MILE 12
HAZE 3

- INDICATES NEGATIVE NUMBERS.
R INDICATES RECORD WAS SET OR TIED.
MM INDICATES DATA IS MISSING.
T INDICATES TRACE AMOUNT.

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Climatological Report (Monthly)

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CXUS56 KPQR 041830

CLMPDX

CLIMATE REPORT

NATIONAL WEATHER SERVICE PORTLAND OREGON

1015 AM PST WED MAR 4 2009

...RETRANSMITTED.

...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF FEBRUARY 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000

CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR'S VALUE	DATE(S)
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..... TEMPERATURE (F)

RECORD

HIGH	71	02/28/1988				
LOW	-3	02/02/1950				
HIGHEST	59	02/04			63	02/29 02/28
LOWEST	25	02/12			29	02/17
AVG. MAXIMUM	50.2		50.3	-0.1	52.4	
AVG. MINIMUM	32.4		35.9	-3.5	37.3	
MEAN	41.3		43.1	-1.8	44.9	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		0.3	-0.3	0	
DAYS MIN <= 32	17		7.1	9.9	6	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES)

RECORD

MAXIMUM	10.03	1996			
MINIMUM	0.72	1993			
TOTALS	1.36		4.18	-2.82	2.19
DAYS >= .01	15		15.9	-0.9	15
DAYS >= .10	5		10.5	-5.5	6

DAYS >= .50	0	2.2	-2.2	2
DAYS >= 1.00	0	0.5	-0.5	0

GREATEST

24 HR. TOTAL 0.45 02/23 TO 02/24

SNOWFALL (INCHES)

TOTALS 0.0

DEGREE_DAYS

HEATING TOTAL	656	605	51	578
SINCE 7/1	3164	3125	39	3207
COOLING TOTAL	0	0	0	0
SINCE 1/1	0	0	0	0

.....

WIND (MPH)

AVERAGE WIND SPEED	6.2		
RESULTANT WIND SPEED/DIRECTION	3/126		
HIGHEST WIND SPEED/DIRECTION	30/230	DATE	02/25
HIGHEST GUST SPEED/DIRECTION	36/240	DATE	02/25

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR	1
NUMBER OF DAYS PC	16
NUMBER OF DAYS CLOUDY	11

AVERAGE RH (PERCENT) 76

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	0	MIXED PRECIP	1
HEAVY RAIN	0	RAIN	3
LIGHT RAIN	15	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	1
LIGHT SNOW	4	SLEET	0
FOG	23	FOG W/VIS <= 1/4 MILE	7
HAZE	3		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

#FINAL-02-09#

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - <http://www.ncdc.noaa.gov>.

Climatological Report (Monthly)

000
CXUS56 KPQR 011524
CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
824 AM PDT WED APR 1 2009

.....

...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF MARCH 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE	DATE(S)
---------	-------------------	---------	-----------------	--------------------------	----------------------	---------

.....

TEMPERATURE (F)

HIGHEST	61				65	03/10
LOWEST	29				32	03/22
AVG. MAXIMUM	52.5		55.7	-3.2	52.9	
AVG. MINIMUM	38.1		38.6	-0.5	37.9	
MEAN	45.3		47.2	-1.9	45.4	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	3		3.0	0.0	1	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES)

RECORD

MAXIMUM	7.14	1997				
MINIMUM	1.49	1978				
TOTALS	3.36		3.71	-0.35	3.71	
DAYS >= .01	25		17.2	7.8	24	
DAYS >= .10	15		10.4	4.6	13	
DAYS >= .50	0		1.7	-1.7	1	
DAYS >= 1.00	0		0.1	-0.1	0	
GREATEST						

24 HR. TOTAL 0.49 03/28 TO 03/28

SNOWFALL (INCHES)

TOTALS MM

DEGREE_DAYS

HEATING TOTAL	599	536	63	598
SINCE 7/1	3763	3661	102	3805
COOLING TOTAL	0	0	0	0
SINCE 1/1	0	0	0	0

.....

WIND (MPH)

AVERAGE WIND SPEED	7.4		
RESULTANT WIND SPEED/DIRECTION	2/166		
HIGHEST WIND SPEED/DIRECTION	36/250	DATE	03/15
HIGHEST GUST SPEED/DIRECTION	46/260	DATE	03/15

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR	2
NUMBER OF DAYS PC	7
NUMBER OF DAYS CLOUDY	22

AVERAGE RH (PERCENT) 71

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	1	MIXED PRECIP	0
HEAVY RAIN	4	RAIN	7
LIGHT RAIN	24	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	4
HEAVY SNOW	0	SNOW	1
LIGHT SNOW	3	SLEET	0
FOG	19	FOG W/VIS <= 1/4 MILE	3
HAZE	3		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

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Climatological Report (Monthly)

000
CXUS56 KPQR 011559
CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
859 AM PDT FRI MAY 1 2009

...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF APRIL 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR'S VALUE	DATE(S)
---------	-------------------	---------	-----------------	--------------------------	----------------------	---------

TEMPERATURE (F)

HIGHEST	83				78	04/12
LOWEST	31				31	04/01
AVG. MAXIMUM	62.3		60.5	1.8	56.7	
AVG. MINIMUM	42.2		41.9	0.3	40.3	
MEAN	52.3		51.2	1.1	48.5	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	1		0.7	0.3	1	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES) RECORD

MAXIMUM	5.26	1993			
MINIMUM	1.04	1998			
TOTALS	2.31		2.64	-0.33	2.09
DAYS >= .01	14		15.3	-1.3	21
DAYS >= .10	8		7.9	0.1	8
DAYS >= .50	1		0.9	0.1	1
DAYS >= 1.00	0		0.2	-0.2	0
GREATEST					

24 HR. TOTAL 0.63 04/27 TO 04/28

SNOWFALL (INCHES)

TOTALS 0.0

DEGREE DAYS

HEATING TOTAL	374	400	-26	490
SINCE 7/1	4137	4061	76	4295
COOLING TOTAL	0	1	-1	0
SINCE 1/1	0	1	-1	0

WIND (MPH)

AVERAGE WIND SPEED	6.2		
RESULTANT WIND SPEED/DIRECTION	1/254		
HIGHEST WIND SPEED/DIRECTION	25/270	DATE	04/13
HIGHEST GUST SPEED/DIRECTION	35/200	DATE	04/12

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR	5
NUMBER OF DAYS PC	14
NUMBER OF DAYS CLOUDY	11

AVERAGE RH (PERCENT) 64

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	1	MIXED PRECIP	0
HEAVY RAIN	0	RAIN	6
LIGHT RAIN	17	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	1
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	10	FOG W/VIS <= 1/4 MILE	1
HAZE	4		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

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Climatological Report (Monthly)

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CXUS56 KPQR 011530

CLMPDX

CLIMATE REPORT

NATIONAL WEATHER SERVICE PORTLAND OREGON

824 AM PDT MON JUN 1 2009

.....

...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF MAY 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000

CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE	DATE(S)
---------	-------------------	---------	-----------------	--------------------------	----------------------	---------

.....

TEMPERATURE (F)

HIGHEST	88				95	05/17
LOWEST	42				39	05/04
AVG. MAXIMUM	71.5		66.7	4.8	67.5	
AVG. MINIMUM	48.7		47.5	1.2	50.3	
MEAN	60.1		57.1	3.0	58.9	
DAYS MAX >= 90	0		0.4	-0.4	2	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	0		0.0	0.0	0	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES)

RECORD

MAXIMUM 5.55 1993

MINIMUM 0.10 1992

TOTALS	3.26		2.38	0.88	2.03	
DAYS >= .01	14		12.8	1.2	15	
DAYS >= .10	6		7.0	-1.0	5	
DAYS >= .50	3		1.2	1.8	1	
DAYS >= 1.00	1		0.1	0.9	0	

GREATEST

24 HR. TOTAL 1.09 05/04 TO 05/05

SNOWFALL (INCHES)

TOTALS 0.0

DEGREE_DAYS

HEATING TOTAL	175	243	-68	223
SINCE 7/1	4312	4304	8	4518
COOLING TOTAL	34	14	20	40
SINCE 1/1	34	15	19	40

.....

WIND (MPH)

AVERAGE WIND SPEED	7.3		
RESULTANT WIND SPEED/DIRECTION	3/294		
HIGHEST WIND SPEED/DIRECTION	29/250	DATE	05/05
HIGHEST GUST SPEED/DIRECTION	41/240	DATE	05/02

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR	12
NUMBER OF DAYS PC	13
NUMBER OF DAYS CLOUDY	6

AVERAGE RH (PERCENT) 60

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	1	MIXED PRECIP	0
HEAVY RAIN	4	RAIN	7
LIGHT RAIN	12	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	8	FOG W/VIS <= 1/4 MILE	0
HAZE	7		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

REMARKS...4TH/ RECORD RAINFALL 1.02 INCHES. OLD RECORD 0.74 INCHES IN 1979.

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Climatological Report (Monthly)

000
CXUS56 KPQR 011450
CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
750 AM PDT WED JUL 1 2009

...THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF JUNE 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000
CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE (S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR'S VALUE	DATE (S)
.....						
TEMPERATURE (F)						
HIGHEST	90				100	06/28
LOWEST	51				46	06/10
AVG. MAXIMUM	74.8		72.7	2.1	71.8	
AVG. MINIMUM	56.6		52.6	4.0	51.9	
MEAN	65.7		62.7	3.0	61.8	
DAYS MAX >= 90	1		1.1	-0.1	1	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	0		0.0	0.0	0	
DAYS MIN <= 0	0		0.0	0.0	0	

PRECIPITATION (INCHES)
RECORD

MAXIMUM	4.06	1984			
MINIMUM	0.14	1987			
TOTALS	1.32		1.59	-0.27	1.01
DAYS >= .01	9		8.8	0.2	10
DAYS >= .10	2		4.5	-2.5	1
DAYS >= .50	1		0.7	0.3	1
DAYS >= 1.00	0		0.1	-0.1	0
GREATEST					

24 HR. TOTAL 0.97 06/18 TO 06/19

SNOWFALL (INCHES)

TOTALS 0.0

DEGREE_DAYS

HEATING TOTAL	29	96	-67	147
SINCE 7/1	4341	4400	-59	4665
COOLING TOTAL	56	43	13	58
SINCE 1/1	90	58	32	98

WIND (MPH)

AVERAGE WIND SPEED	6.0		
RESULTANT WIND SPEED/DIRECTION	4/304		
HIGHEST WIND SPEED/DIRECTION	39/190	DATE	06/04
HIGHEST GUST SPEED/DIRECTION	49/190	DATE	06/04

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR	5
NUMBER OF DAYS PC	8
NUMBER OF DAYS CLOUDY	17

AVERAGE RH (PERCENT) 61

WEATHER CONDITIONS. NUMBER OF DAYS WITH

THUNDERSTORM	1	MIXED PRECIP	0
HEAVY RAIN	1	RAIN	2
LIGHT RAIN	10	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	3	FOG W/VIS <= 1/4 MILE	0
HAZE	13		

- INDICATES NEGATIVE NUMBERS.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

February 27, 2009

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

Zinc ONLY

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 02/24/09 14:10.
The following list is a summary of the Work Orders contained in this report, generated on 02/27/09 16:32.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PSB0684	Stormwater	NA

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

all three places

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
02/27/09 16:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSB0684-01	Water	02/23/09 14:05	02/24/09 14:10
Culvert	PSB0684-02	Water	02/23/09 14:00	02/24/09 14:10
Pond	PSB0684-03	Water	02/23/09 14:10	02/24/09 14:10

TestAmerica Portland



Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
02/27/09 16:32

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0684-01 (Outfall 001)		Water				Sampled: 02/23/09 14:05				
Zinc	EPA 200.8	0.173	-----	0.00500	mg/l	1x	9020798	02/25/09 11:44	02/25/09 22:48	
PSB0684-02 (Culvert)		Water				Sampled: 02/23/09 14:00				
Zinc	EPA 200.8	3.32	-----	0.0500	mg/l	10x	9020798	02/25/09 11:44	02/26/09 01:19	
PSB0684-03 (Pond)		Water				Sampled: 02/23/09 14:10				
Zinc	EPA 200.8	0.00643	-----	0.00500	mg/l	1x	9020798	02/25/09 11:44	02/25/09 23:15	

TestAmerica Portland



Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greene

Report Created:

02/27/09 16:32

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9020798

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9020798-BLK1)							Extracted: 02/25/09 11:44							
Zinc	EPA 200.8	ND	---	0.00500	mg/l	1x	--	--	--	--	--	--	02/25/09 22:10	
LCS (9020798-BS1)							Extracted: 02/25/09 11:44							
Zinc	EPA 200.8	0.0899	---	0.00500	mg/l	1x	--	0.100	89.9%	(85-115)	--	--	02/25/09 22:16	
Duplicate (9020798-DUP1)							QC Source: PSB0546-10		Extracted: 02/25/09 11:44					
Zinc	EPA 200.8	0.0679	---	0.00500	mg/l	1x	0.0676	--	--	--	0.516% (20)	--	02/25/09 22:26	
Matrix Spike (9020798-MS1)							QC Source: PSB0546-11		Extracted: 02/25/09 11:44					
Zinc	EPA 200.8	0.0959	---	0.00500	mg/l	1x	0.00161	0.100	94.3%	(70-130)	--	--	02/25/09 22:43	
Matrix Spike (9020798-MS2)							QC Source: PSB0684-01		Extracted: 02/25/09 11:44					
Zinc	EPA 200.8	0.272	---	0.00500	mg/l	1x	0.173	0.100	98.5%	(70-130)	--	--	02/25/09 22:53	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
02/27/09 16:32

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244
11922 E. First Ave, Spokane, WA 99206-5302
9405 SW Nimbus Ave. Beaverton, OR 97008-7145
2000 W International Airport Rd Ste A10, Anchorage, AK 99502 1119

425-420-9200 FAX 420-9210
509-924-9200 FAX 924-9290
503-906-9200 FAX 906-9210
907-563 9200 FAX 563 9210

CHAIN OF CUSTODY REPORT

Work Order #: **PSB0684**

CLIENT: Kinder Morgan Bulk Terminals - T-5 - Portland				INVOICE TO:				TURNAROUND REQUEST in Business Days * Organic & Inorganic Analyses 10 7 5 4 2 1 <1 STD. Petroleum Hydrocarbon Analyses 5 4 3 2 1 <1 STD. OTHER Specify: * Turnaround Requests less than standard may incur Rush Charges.			
REPORT TO: Katina Greene				P.O. NUMBER:							
ADDRESS: 15550 N Lombard Terminal 5 Portland, OR 97203											
PHONE: 503-235-4200 FAX: 503-235-7753											
PROJECT NAME: 5 fuel tanks				PRESERVATIVE							
PROJECT NUMBER:											
SAMPLED BY: Lawrence Spangler				REQUESTED ANALYSES							
CLIENT SAMPLE IDENTIFICATION		SAMPLING DATE/TIME		2N		Scum		Grab			
1 at fall / oil		02-23-09 1405		X		X					
2 solvent		02-23-09 1400		X							
3 Pond		02-23-09 1410		X							
4											
5											
6											
7											
8											
9											
10											
RELEASED BY:				DATE: 02-24-09				RECEIVED BY: [Signature]			
PRINT NAME: IN LAB				FIRM: TAP				PRINT NAME: Lawrence Spangler			
FIRM: TAP				TIME: 1436				FIRM: TAP			
RELEASED BY:				DATE:				RECEIVED BY:			
PRINT NAME:				TIME:				PRINT NAME:			
FIRM:				TIME:				FIRM:			
ADDITIONAL REMARKS:										TEMP:	
										PAGE 1 OF 1	

TAL-1000(0408)

KMB00010346

TestAmerica Sample Receipt Checklist

Received by:

Unpacked by:

Logged-in by:

Work Order No.

PSB0684

(section A)

(section B)

Date: 02-24-09

Date: 2-24-09

Date: 2/24/09

Time: 1430

Initials:

Initials: jpm

Client: Kinder Morgan

Project: SW

Temperature out of range.

Initials: mas

***ESI Clients (see Section C)

Digi #1

Digi #2

Cooler Temperature (IR): 2.9 °C plastic glass NA (oil/air samples, ESI client)

Temperature Blank: °C

Not enough Ice
No Ice
Ice Melted
Win 4 Hours
Other

A

Custody Seals: (#)

Signature: Y N Dated:

X None

Received from:

X TA Courier

Senvoy

UPS

Fed Ex

Client

TDP

DHL

SDS

Mid-Valley

GS/TA

GS/Senvoy

Other:

Container Type:

X #Cooler(s)

#Box(s)

None (#Other:)

Coolant Type:

Gel Ice

X Loose Ice

None

Packing Material:

Bubble Bags

Styrofoam Cubbies

Peanuts

X None (Other:)

B

Sample Status:

(If N circled, see NOD)

General:

Intact?

Y

N

Containers Match COC?

Y

N

none given

IDs Match COC?

Y

N

For Analyses Requested:

Cyanide Checked?

Y

N

NA

Correct Type & Preservation?

X

N

Adequate Volume?

Y

N

Within Hold Time?

Y

N

HF Dilution Required?

Y

N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace?

Y

N

NA

TB on COC? not provided

Y

N

NA

Metals:

HNO3 Preserved?

Y

N

NA

Dissolved Metals Filtered?

Y

N

NA

C

***ESI Clients Only:

Temperature Blank: °C not provided Digi: #1 #2

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number?

FED EX Goldstreak UPS DHL Other:

Project Managers:

Comments:

PM Reviewed: (Initial/Date)

KMB00010347



1200-Z STORMWATER MONITORING DATA

KINDER MORGAN BULK TERM. 5 Inc.

15550 N LOMBARD ST

Org ID: 25447

Parameter (mg/L)	pH (stu)	TSS	O&G	Cu	Pb	Zn
Benchmark	5.5 - 9.0	130	10	0.1	0.4	0.6

Location Code: 01 **Description: SAMPLING MANHOLE IN NORTH CORNER OF PROPERTY**

Permit Year	Sample Date	Tester	pH	TSS	O/G	Copper	Lead	Zinc	COD
	07-08	2/8/2008	self	7.61	10	< 2.36	0.0037	0.0012	0.021
	07-08	1/8/2008	self	7.38	10	< 2.4	0.0025	< 0.001	0.031
	07-08	11/17/2007	self	6.55	10	< 4.81	0.0057	< 0.001	0.161
	07-08	10/3/2007	self	6.43	29	< 4.76	0.0026	0.0008	0.15
06-07		1/2/2007	self	7.16	< 10	< 4.76	0.00302	< 0.001	0.0336
06-07		10/16/2006	self	6.85	24	< 4.76	0.00228	0.00116	0.112
	05-06	2/28/2006	self	8	< 10	< 4.72	< 0.002	< 0.001	0.0238
	05-06	2/2/2006	city	7.4	3	< 5	0.0021	0.00022	0.0232 6
	05-06	10/31/2005	self	6.44	56	< 4.72	0.00327	0.00153	0.18
04-05		3/19/2005	self	7.24	14	< 5	< 0.001	< 0.001	0.0376
04-05		10/19/2004	self	8.78	16	9.41	0.0049	0.00179	0.0846
	03-04	2/27/2004	self	7.89	< 10	< 5	< 0.002	< 0.001	0.023
	03-04	11/19/2003	self	7.15	< 10	< 5	0.00222	< 0.001	0.0286
02-03		4/2/2003	self	8.44	< 10	< 5	< 0.002	< 0.001	0.00605
02-03		1/6/2003	self	7.37	10	< 5	< 0.02	< 0.01	< 0.05

Revised: 3/23/2009

KINDER MORGAN BULK TERM. 5 Inc.

Stormwater Monitoring Report

Page 1 of 1

This report is intended for internal use. The City of Portland makes no warranty, expressed or implied, as to the completeness or accuracy of the information presented in this table. For compliance or reporting purposes, the user should refer to the corresponding laboratory reports.

KMB00010348



1200-Z STORMWATER MONITORING DATA

KINDER MORGAN BULK TERM. 5 Inc.
15550 N LOMBARD ST

Org ID: 25447

Parameter (mg/L)	pH (stu)	TSS	O&G	Cu	Pb	Zn
Benchmark	5.5 - 9.0	130	10	0.1	0.4	0.6

Location Code: 01 Description: SAMPLING MANHOLE IN NORTH CORNER OF PROPERTY

Permit Year	Sample Date	Tester	pH	TSS	O/G	Copper	Lead	Zinc	COD
08-09	3/14/2009	self	7.19	20	< 4.8	0.0072	0.0014	0.261	
08-09	12/12/2008	self	6.48	64	< 2.4	0.0188	0.0057	1.02	
08-09	11/10/2008	self	6.42	32.7	< 2.4	0.004	0.001	0.621	
07-08	2/10/2008	self	6.86		< 2.4	< 0.002	< 0.001	0.209	
07-08	2/8/2008	self	7.61	10	< 2.36	0.0037	0.0012	0.021	
07-08	1/8/2008	self	7.38	10	< 2.4	0.0025	< 0.001	0.031	
07-08	11/17/2007	self	6.55	10	< 4.81	0.0057	< 0.001	0.161	
07-08	10/3/2007	self	6.43	29	< 4.76	0.0026	0.0008	0.15	
06-07	1/2/2007	self	7.16	< 10	< 4.76	0.00302	< 0.001	0.0336	
06-07	10/16/2006	self	6.85	24	< 4.76	0.00228	0.00116	0.112	
05-06	2/28/2006	self	8	< 10	< 4.72	< 0.002	< 0.001	0.0238	
05-06	2/2/2006	city	7.4	3	< 5	0.0021	0.00022	0.0232	6
05-06	10/31/2005	self	6.44	56	< 4.72	0.00327	0.00153	0.18	
04-05	3/19/2005	self	7.24	14	< 5	< 0.001	< 0.001	0.0376	
04-05	10/19/2004	self	8.78	16	9.41	0.0049	0.00179	0.0846	
03-04	2/27/2004	self	7.89	< 10	< 5	< 0.002	< 0.001	0.023	
03-04	11/19/2003	self	7.15	< 10	< 5	0.00222	< 0.001	0.0286	
02-03	4/2/2003	self	8.44	< 10	< 5	< 0.002	< 0.001	0.00605	
02-03	1/6/2003	self	7.37	10	< 5	< 0.02	< 0.01	< 0.05	

Revised: 2/25/2010

KINDER MORGAN BULK TERM. 5 Inc.

Stormwater Monitoring Report

Page 1 of 1

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KMB00010349



1200-Z STORMWATER MONITORING DATA

KINDER MORGAN BULK TERM. 5 Inc.
15550 N LOMBARD ST

Org ID: 25447

Parameter (mg/L)	pH (stu)	TSS	O&G	Cu	Pb	Zn
Benchmark	5.5 - 9.0	130	10	0.1	0.4	0.6

Location Code: 01 **Description: SAMPLING MANHOLE IN NORTH CORNER OF PROPERTY**

Permit Year	Sample Date	Tester	pH	TSS	O/G	Copper	Lead	Zinc	COD
	07-08	2/8/2008	self	7.61	10	< 2.36	0.0037	0.0012	0.021
	07-08	1/8/2008	self	7.38	10	< 2.4	0.0025	< 0.001	0.031
	07-08	11/17/2007	self	6.55	10	< 4.81	0.0057	< 0.001	0.161
	07-08	10/3/2007	self	6.43	29	< 4.76	0.0026	0.0008	0.15
06-07		1/2/2007	self	7.16	< 10	< 4.76	0.00302	< 0.001	0.0336
06-07		10/16/2006	self	6.85	24	< 4.76	0.00228	0.00116	0.112
	05-06	2/28/2006	self	8	< 10	< 4.72	< 0.002	< 0.001	0.0238
	05-06	2/2/2006	city	7.4	3	< 5	0.0021	0.00022	0.0232 6
	05-06	10/31/2005	self	6.44	56	< 4.72	0.00327	0.00153	0.18
04-05		3/19/2005	self	7.24	14	< 5	< 0.001	< 0.001	0.0376
04-05		10/19/2004	self	8.78	16	9.41	0.0049	0.00179	0.0846
	03-04	2/27/2004	self	7.89	< 10	< 5	< 0.002	< 0.001	0.023
	03-04	11/19/2003	self	7.15	< 10	< 5	0.00222	< 0.001	0.0286
02-03		4/2/2003	self	8.44	< 10	< 5	< 0.002	< 0.001	0.00605
02-03		1/6/2003	self	7.37	10	< 5	< 0.02	< 0.01	< 0.05

Revised: 3/23/2009

KINDER MORGAN BULK TERM. 5 Inc.

Stormwater Monitoring Report

Page 1 of 1

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KMB00010350



July 9, 2008

Mr. Dennis Jurries, PE
DEQ NWR Storm Water Engineer
2020 SW Fourth Avenue, Suite 400
Portland, OR 97201-4987

Re: Annual Stormwater Report for 2008

Ref: Permit #101377

Dear Mr. Jurries:

Enclosed is the annual Stormwater Report for Kinder Morgan Terminals operations at our Portland Bulk Terminal 5 Facility for the year ending June 30, 2008.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,

KINDER MORGAN BULK TERMINALS, INC.

Jack Waller
Terminal Manager

Cc: Regional EHS Manager
File



Kinder Morgan Terminals

July 9, 2008

Mr. Timothy P. Dean
City of Portland - Environmental Services
Water Pollution Control Laboratory
Industrial Stormwater Program
6543 N. Burlington Avenue
Portland, OR 97203-5452

Re: Annual Stormwater Report for 2008

Ref: Permit #101377

Dear Mr. Dean:

Enclosed is the annual Stormwater Report for Kinder Morgan Terminals operations at our Portland Bulk Terminal 5 Facility for the year ending June 30, 2008.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,


KINDER MORGAN BULK TERMINALS, INC.

A handwritten signature in black ink, appearing to read 'Jack Waller', written in a cursive style.

Jack Waller
Terminal Manager

CC: Regional EHS Manager
File

Industrial Stormwater Discharge Monitoring Report - 1200-Z Permit

Permittee Legal Name:	Kinder Morgan	ODEQ File No./Facility ID:	70613	
Facility Common Name:	Portland Bulk Terminals	Reporting Period:	July 1, 2007 to June 30, 2008	
Facility Location:	15550 North Lombard, Portland, OR 97203	Laboratory Name:	TestAmerica	
County:	Multnomah	Laboratory ORELAP #:	OR100021	

Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility has more than 4 sampling points). **You MUST also attach a copy of laboratory results sheet(s) and associated QA/QC information to this form.**

Name or Number of Sampling Point(s) (group data per sampling point)	Sample Date	pH **	Suspended Solids, Total **	Oil and Grease, Total **	Copper, Total	Lead, Total	Zinc, Total	E. coli *	
		s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	counts/100 ml	
Outfall 001	10/3/2007	6.43	29	ND	0.0026	0.00076	0.15		<p>* Only applies to landfills accepting septage/biosolids and sewage treatment plants.</p> <p>** Effluent limits for these parameters apply to some industries - see permit, Schedule A.7.</p> <p>Note 1: Submit this report to the appropriate DEQ regional or agent offices (see below) annually by July 31st. The report must contain the results of all stormwater monitoring conducted during the year. If you have a monitoring waiver for one or more of the pollutant(s), please report "M" in the column(s)-see permit-Schedule B.3.</p> <p>Note 2: Non-detects must be reported as "ND" along with the applicable method detection limit in parentheses - e.g. ND (0.001).</p> <p>Note 3: If a stormwater sampling result exceeds any of the benchmark values, the permit registrant must, within 30 calendar days of receiving the sampling results, investigate the cause of the benchmark exceedance(s), review the SWPCP and submit an Action Plan for department or agent approval.</p> <p>Note 4: For the 4th year of coverage under the permit that became effective on July 1, 2007, report the geometric mean value of the last 4 samples collected for each pollutant parameter, from each sampling point. The geometric mean value is automatically calculated if using the Excel version of the DMR form.</p>
Outfall 001	11/17/2007	6.55	10	ND	0.00568	ND	0.161		
Outfall 001	1/8/2008	7.38	10	ND	0.00253	ND	0.0306		
Outfall 001	2/8/2008	7.61	10	ND	0.00366	0.00115	0.0206		
Geometric Mean (Note 4)		6.974	13.050		0.003	0.001	0.062		
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Geometric Mean (Note 4)									
Permit Benchmark		5.5 - 9.0	130	10	0.1	0.4	0.6	406	

Name/Title Principal Executive Officer or Authorized Delegate	
(Please Print)	
Telephone: 503-285-4200	Email: wallerj@kindermorgan.com
I certify, under penalty of law, that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.	
Sign here:	Date: 7/9/08

See reverse side for additional visual monitoring requirements

Monthly Visual Observations

Record Visual Observations for Oil and Grease Sheen and Floating Solids:		
	Oil and Grease Sheen - No visible sheen allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.	Floating Solids (associated with industrial activities) - No visible discharge allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.
Date	Observations (please note the sampling point(s) name or number)	
July	See Attached Portland Bulk Terminals, LLC Visual Monitoring Report	
August		
September		
October		
November		
December		
January		
February		
March		
April		
May		
June		

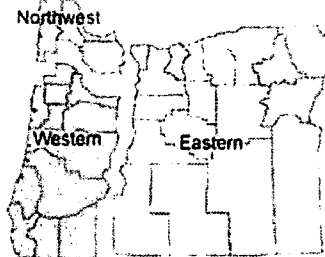
For facilities located within the following local jurisdictions, please submit one (1) copy of this report and laboratory results sheet(s) and QA/QC documentation to the local jurisdiction annually by July 31st:

Clean Water Services
Industrial Stormwater
2550 SW Hillsboro Hwy.
Hillsboro, OR 97123

City of Portland
Industrial Stormwater
Section
Water Pollution Control Lab
6543 N Burlington Ave.
Portland, OR 97203-5452

City of Eugene
Industrial Source Control
410 River Ave.
Eugene, OR 97404

For all other locations, please submit one (1) copy of this report and laboratory results sheet(s) and the QA/QC documentation to the appropriate DEQ regional office annually by July 31st:



DEQ Northwest Region Office
2020 SW 4th Ave. Suite 400
Portland, OR 97201
Phone: (503) 229-5263
Hours: 8 am - 5 pm

DEQ Eastern Region Office
300 SE Reed Market Rd.
Bend, OR 97702-2237
Phone: (541) 388-6146
Hours: 8 am - 5 pm

DEQ Western Region Office
(Benton, Lincoln, Marion,
Polk, and Yamhill counties)
750 Front St NE, #120
Salem, OR 97301-1039
Phone: (503) 378-8240
Hours: Mon - Thurs: 8 am - 5 pm
Fri: 8 am - noon, 1 - 5 pm

DEQ Western Region Office
(Lane and Linn counties)
1102 Lincoln St. Suite 210
Eugene, OR 97401
Phone: (541) 686-7838
Hours: 8 am - 5 pm

DEQ Western Region Office
(Coos, Curry, Douglas, Jackson,
and Josephine counties)
221 Stewart Ave. Suite 201
Medford, OR 97501
Phone: (541) 776-6010
Hours: 8 am - noon, 1 - 5 pm

STORMWATER POLLUTION PREVENTION MONTHLY VISUAL MONITORING REPORT

YEAR: 2008

Month	Ditches Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Pond Clear of Debris, Blockage, Floating Solids & Oily Sheen?		Water Around Dock Free of Floating Solids & Oily Sheen ?		Dock Surface Free of Excessive Product Spillage ?		Describe any Corrections taken and the date of completion ONLY (Attach separate sheet if required)
	YES	NO	YES	NO	YES	NO	YES	NO	
July - 07	YES		YES		YES		YES		
Aug - 07	YES		YES		YES		YES		
Sept - 07	YES		YES		YES		YES		
Oct - 07	YES		YES		YES		YES		
Nov - 07	YES		YES		YES		YES		
Dec - 07	YES		YES		YES		YES		
Jan - 08	YES		YES		YES		YES		
Feb - 08	YES		YES		YES		YES		
Mar - 08	YES		YES		YES		YES		
Apr - 08	YES		YES		YES		YES		
May -08	YES		YES		YES		YES		
Jun - 08	YES		YES		YES		YES		

December 04, 2007

Katrina Greene
Kinder Morgan Bulk Terminals: T5-Portland
15550 N. Lombard Terminal 5
Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 11/19/07 09:00.
The following list is a summary of the Work Orders contained in this report, generated on 12/04/07 18:01.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
PQK0679	Stormwater	NA

TestAmerica Portland



Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
12/04/07 18:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PQK0679-01	Water	11/17/07 11:30	11/19/07 09:00

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greene

Report Created:

12/04/07 18:01

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

TestAmerica Portland

Becky L. Cove

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greenc

Report Created:
12/04/07 18:01

Total Metals per EPA 200 Series Methods
TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01 (Outfall 001)		Water		Sampled: 11/17/07 11:30						
Copper	EPA 200.8	0.00568	----	0.00200	mg/l	1x	7110842	11/21/07 10:45	11/24/07 04:25	
Lead	"	ND	----	0.00100	"	"	"	"	"	
Zinc	"	0.161	----	0.00500	"	"	"	"	11/27/07 02:53	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Grcenc

Report Created:
12/04/07 18:01

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01 (Outfall 001)		Water		Sampled: 11/17/07 11:30						
Total Suspended Solids	SM 2540D	10.0	----	10.0	mg/l	1x	7110848	11/21/07 11:05	11/21/07 17:23	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: **Stormwater**

Project Number: NA

Project Manager: Katrina Greene

Report Created:

12/04/07 18:01

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01	(Outfall 001)	Water		Sampled: 11/17/07 11:30						
pH	EPA 150.1	6.55	-----		pH Units	1x	7110835	11/17/07 11:35	11/17/07 11:40	

TestAmerica Portland

Benjamin L. Comer

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
12/04/07 18:01

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7120007

Water Preparation Method: O&G prep CE

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120007-BLK1)										Extracted: 12/03/07 08:30				
Oil & Grease	EPA 1664	ND	--	5.00	mg/l	1x	--	--	--	--	--	--	12/03/07 16:06	
LCS (7120007-BS1)										Extracted: 12/03/07 08:30				
Oil & Grease	EPA 1664	37.3	--		mg/l	1x	--	40.0	93.2%	(78-114)	--	--	12/03/07 16:06	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Grecne

Report Created:
12/04/07 18:01

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7110842

Water Preparation Method: EPA 200/3005

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7110842-BLK1)										Extracted: 11/21/07 10:45				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	--	--	--	--	--	--	11/22/07 01:33	
Lead	"	ND	---	0.00100	"	"	--	--	--	--	--	--	"	
Zinc	"	ND	---	0.00500	"	"	--	--	--	--	--	--	"	
LCS (7110842-BS1)										Extracted: 11/21/07 10:45				
Copper	EPA 200.8	0.0489	---	0.00200	mg/l	1x	--	0.0500	97.9%	(85-115)	--	--	11/22/07 01:38	
Lead	"	0.0463	---	0.00100	"	"	--	"	92.5%	"	--	--	"	
Zinc	"	0.0483	---	0.00500	"	"	--	"	96.5%	"	--	--	"	
Duplicate (7110842-DUP1)										QC Source: PQK0574-01 Extracted: 11/21/07 10:45				
Copper	EPA 200.8	ND	---	0.00200	mg/l	1x	ND	--	--	--	10.7%	(20)	11/22/07 01:48	
Lead	"	ND	---	0.00100	"	"	ND	--	--	--	NR	"	"	
Zinc	"	ND	---	0.00500	"	"	ND	--	--	--	39.3%	"	"	R4
Matrix Spike (7110842-MS1)										QC Source: PQK0574-02 Extracted: 11/21/07 10:45				
Copper	EPA 200.8	0.0501	---	0.00200	mg/l	1x	0.000608	0.0500	98.9%	(75-125)	--	--	11/22/07 01:57	
Lead	"	0.0467	---	0.00100	"	"	ND	"	93.4%	"	--	--	"	
Zinc	"	0.0516	---	0.00500	"	"	0.00115	"	101%	(70-130)	--	--	"	
Matrix Spike (7110842-MS2)										QC Source: PQK0574-03 Extracted: 11/21/07 10:45				
Copper	EPA 200.8	0.0561	---	0.00200	mg/l	1x	0.00790	0.0500	96.4%	(75-125)	--	--	11/22/07 02:07	
Lead	"	0.0458	---	0.00100	"	"	ND	"	91.6%	"	--	--	"	
Zinc	"	0.0513	---	0.00500	"	"	0.00107	"	100%	(70-130)	--	--	"	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
12/04/07 18:01

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 7110848

Water Preparation Method: General Preparation

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7110848-BLK1)								Extracted: 11/21/07 11:05						
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	11/21/07 17:23	
Blank (7110848-BLK2)								Extracted: 11/21/07 11:05						
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	--	--	--	--	--	--	11/21/07 17:23	
LCS (7110848-BS1)								Extracted: 11/21/07 11:05						
Total Suspended Solids	SM 2540D	60.0	---	10.0	mg/l	1x	--	50.0	120%	(80-120)	--	--	11/21/07 17:23	
LCS (7110848-BS2)								Extracted: 11/21/07 11:05						
Total Suspended Solids	SM 2540D	50.0	---	10.0	mg/l	1x	--	50.0	100%	(80-120)	--	--	11/21/07 17:23	
Duplicate (7110848-DUP1)								QC Source: PQK0765-01		Extracted: 11/21/07 11:05				
Total Suspended Solids	SM 2540D	ND	---	10.0	mg/l	1x	ND	--	--	--	NR	(20)	11/21/07 17:23	
Duplicate (7110848-DUP2)								QC Source: PQK0765-02		Extracted: 11/21/07 11:05				
Total Suspended Solids	SM 2540D	20.0	---	10.0	mg/l	1x	20.0	--	--	--	0.00%	(20)	11/21/07 17:23	

TestAmerica Portland

Brian L. Cone

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5
Portland, OR 97203

Project Name: **Stormwater**
Project Number: NA
Project Manager: Katrina Greene

Report Created:
12/04/07 18:01

Notes and Definitions

Report Specific Notes:

R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Brian L. Cone

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TestAmerica Sample Receipt Checklist

Received by:

Unpacked by:

Logged-in by:

Work Order No. PQK0679

Kit: 5
Kit: 4
Kit: 5
Cooler ID(s): 071

(section A)

(section B)

Date: 11-19-07

Date: 11/19/07

Date: 11/19/07

Client: Kinder-Morgan

T-5

Time: 0900

Initials: TJ

Initials: JL

Project: Stormwater

Temperature out of range:

Initials: IAS

***ESI Clients (see Section C)

Cooler Temperature (IR): 0.1 °C plastic glass NA (oil/air samples, ESI client)

Temperature Blank: _____ °C

☐ Not enough Ice
☐ No Ice
☐ Ice Melted
☐ W/in 4 Hours
☐ Other: _____

A Custody Seals: (# _____)

Signature: Y N Dated: _____

☒ None

Received from:

☒ TA Courier

☐ Envoy

☐ UPS

☐ Fed Ex

☐ Client

☐ TDP

☐ DHL

☐ SDS

☐ Mid-Valley

☐ GS/TA

☐ GS/Envoy

☐ Other: _____

Container Type:

☒ #Cooler(s)

☐ #Box(s)

☐ None (#Other: _____)

Coolant Type:

☐ Gel Ice

☒ Loose Ice

☐ None

Packing Material:

☐ Bubble Bags

☐ Styrofoam Cubbies

☒ None (Other: _____)

B

Sample Status:

(If N circled, see NOD)

General:

Intact? ☒ Y N

Containers Match COC? ☒ Y N none given

IDs Match COC? ☒ Y N

For Analyses Requested:

Correct Type & Preservation? ☒ Y N

Adequate Volume? ☒ Y N

Within Hold Time? ☒ Y N

Volatiles/ Oil Quality:

VOAs/ Syringes free of Headspace? Y N NA

TB on COC? not provided Y N NA

Metals:

HNO3 Preserved? ☒ Y N NA

Dissolved Metals Filtered? Y N NA

C ***ESI Clients Only:

Temperature Blank: _____ °C not provided

All preserved bottles checked Y N NA (voas/soils/all unp.)

All preserved accordingly? Y N (see NOD) NA (voas/soils/all unp.)

FED EX/ UPS: Was the tracking paper keepable? YES NO

If circled NO, what is the Tracking number? _____

FED EX UPS DHL Goldstreak

Other: _____

Project Managers:

Comments: _____

PM Reviewed: ALC 11-21-07

KMB00010367